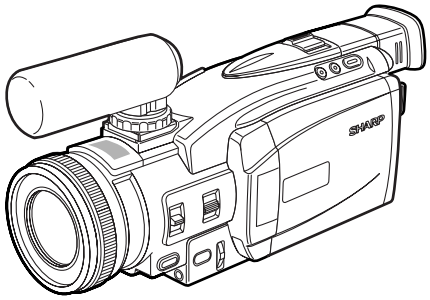
SHARP SERVICE MANUAL

S12E8VL-AX1S/

LIQUID CRYSTAL DIGITAL CAMCORDER PAL



MODELS VL-AX1S/H VL-AX1E/EW/EX

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

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SERVICE MANUAL LIQUID CRYSTAL DIGITAL CAMCORDER PAL MODELS VL-AX1S/H/E/EW/EX

SHARP CORPORATION

1. SPECIFICATIONS

Signal System:	PAL standard
Recording System:	2 rotary heads, helical scanning system
Cassette:	Digital VCR Mini DV video cassette
Recording/Playback Time:	90 minutes (DVM60, LP mode)
Tape Speed:	SP mode: 18.831 mm/second LP mode: 12.568 mm/second
Pickup Device:	1/3.6" 6.4mm, (effective size: 5.0 mm) CCD image sensor (with approx. 1,330,000 pixels including optical black)
Lens:	23x optical/690x digital (in TAPE-CAMERA mode), 22 x optical (in CARD-CAMERA mode) power zoom lens (F1.8-3.5, f = 3.8 – 87.4 mm in TAPE-CAMERA mode, f = 4.0 – 87.4 mm in CARD-CAMERA mode), full-range auto focus
Lens Filter Diameter:	46 mm
Viewfinder:	Electric LCD colour viewfinder
Monitor:	3" (7.5 cm) full-colour LCD screen (TFT active matrix)
Microphone:	Electret stereo microphone
Colour Temperature Compensation:	Auto white balance with white balance lock, outdoor or indoor
Minimum Illumination:	3 lux*(with gain-up, F1.8)
Still Image Compression System:	JPEG base line conformance
Still Image Recording Medium:	SD Memory Card, MultiMediaCard
Power Requirement:	DC 7.4 V
Power Consumption:	4.3 W (during camera recording in TAPE-CAMERA mode using the view-finder in Full Auto mode with the DIS function on) 5.1 W (during camera recording in TAPE-CAMERA mode using the LCD monitor in Full Auto mode with the DIS function on and backlight in normal mode)
Operating Temperature:	0°C to +40°C
Operating Humidity:	30% to 80%
Storage Temperature:	–20°C to +60°C
Dimensions (approx.):	77 mm (W) x 86 mm (H) x 212 mm (D)
Weight (approx.):	655 g (without battery pack, lithium battery, video cassette, lens cap, lens hood, shoulder strap and card)

AC Adapter/Battery Charger(UADP-0321TA01)

Power Requirement:	AC 110-240 V, 50/60 Hz
DC Output:	7.3 V, 1.4A
Dimensions (approx.):	69 mm (W) × 43 mm (H) × 113 mm (D)
Weight (approx.):	160 g

SD Memory Card (Supplied Accessory)

Memory Capacity:	8 MB
Power Requirement:	3 V
Operating Temperature:	0°C to +40°C
Storage Temperature:	–20°C to +65°C

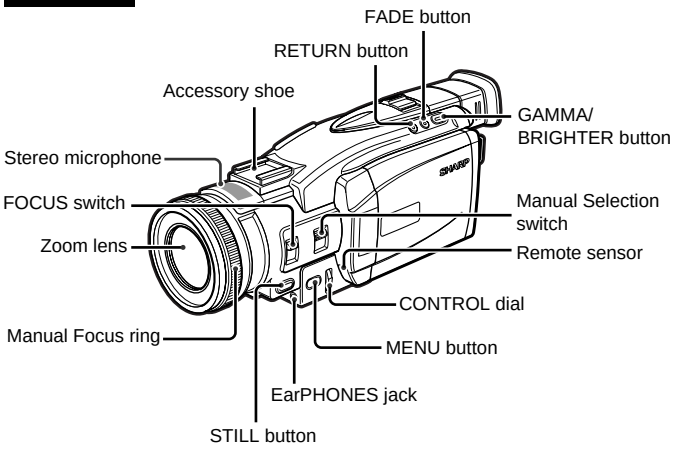
Specifications are subject to change without notice.

*Minimum illumination: Since there is no widely accepted testing procedure for determining minimum illumination capability, lux ratings are comparable only between models from the same manufacturer.

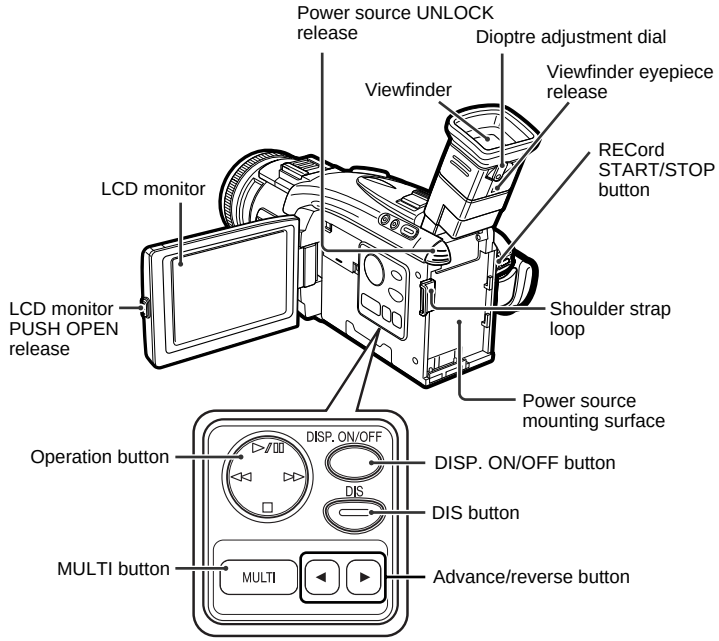
2. PART NAMES

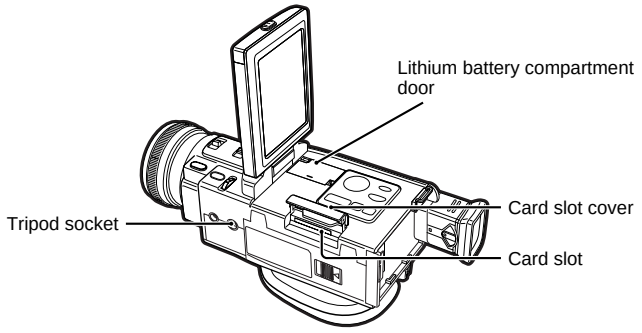
For details on the use of each control.

Front view

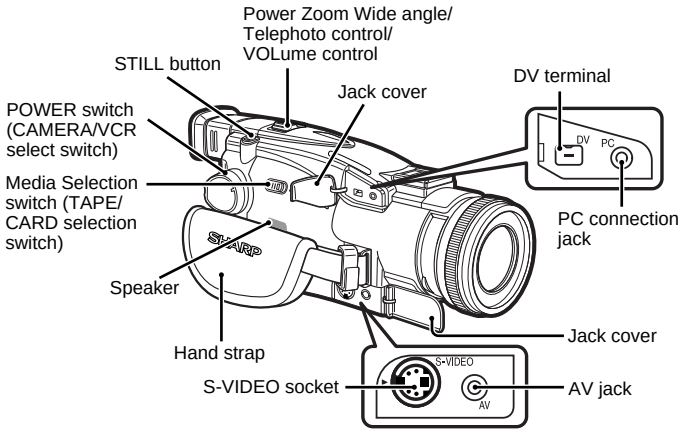


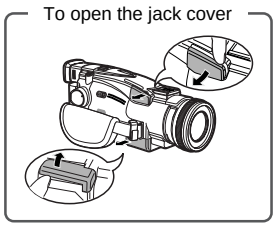
Left view

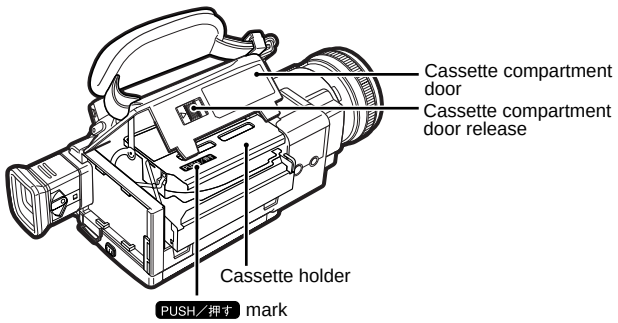




Right view





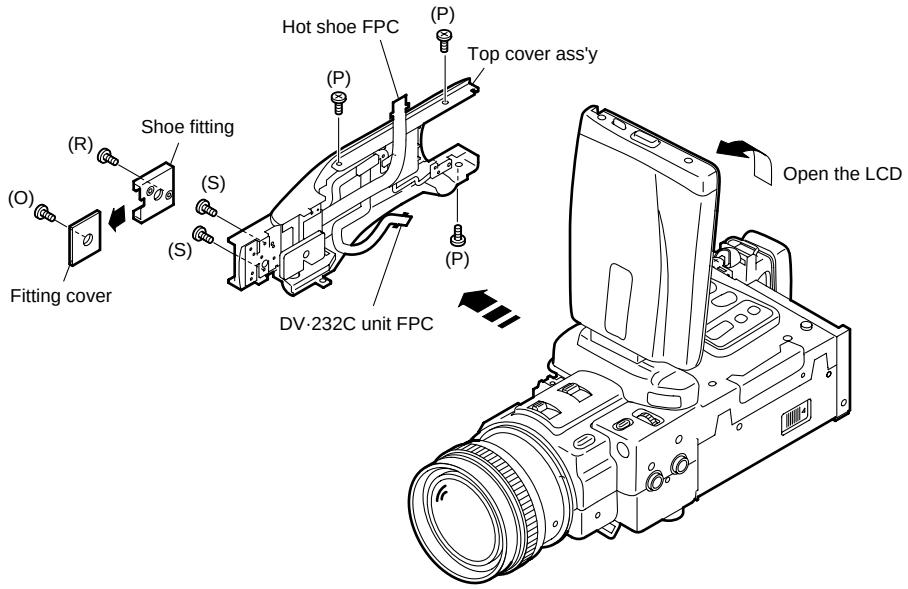


3. DISASSEMBLY OF THE SET

Note:

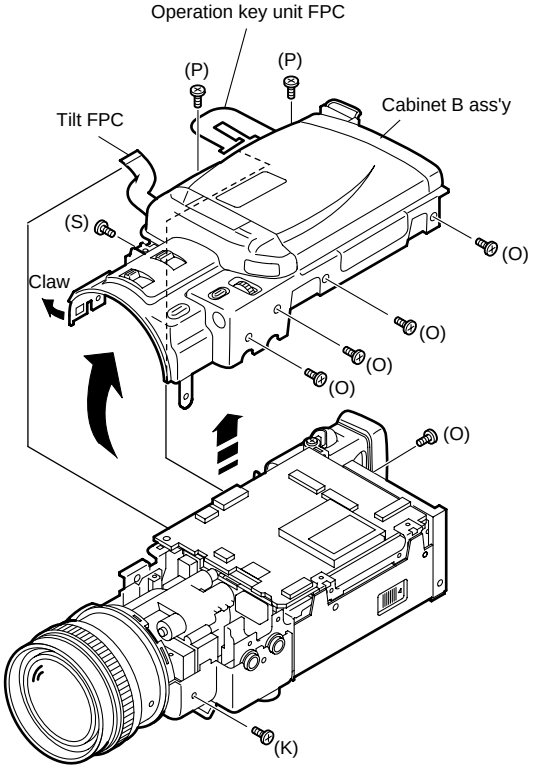
Before removing the cabinet, turn off the power supply, and ascertain that the battery have been removed.

1.



- Remove the 1 screw ((O)XiPSF17P03000). Lifting the fitting cover a little, pull it out in the direction of the arrow.
- Remove the 1 screw ((R)XiPSN17P03000), and pull out the shoe fitting in the direction of the arrow.
- Open the LCD, and remove the 3 screws ((P)XiPSF17P04000) and 2 screws ((S)XiPSN17P04000). Pull out the top cover ass'y in the direction of the arrow to detach the DV•232C unit FPC and hot shoe FPC. (If the top cover ass'y is pulled out by force, the FPC may be cut off. Therefore, pull it our gently.)

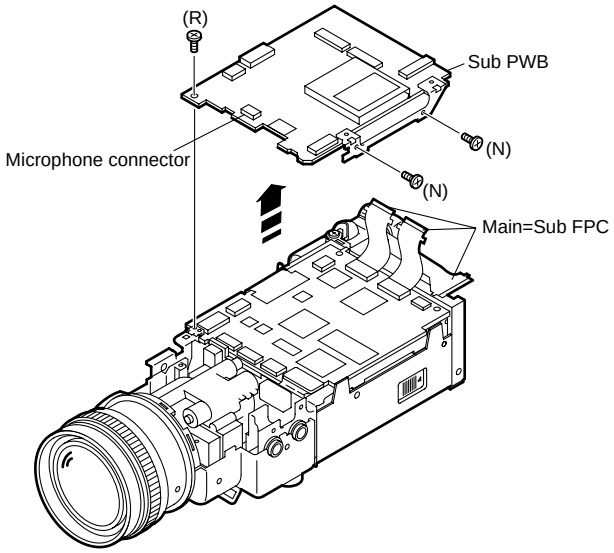
2.



- Detach the operation key unit FPC and Tilt FPC.
- Remove the 1 screw ((S)XiPSN17P04000), 5 screws ((O)XiPSF17P03000), 1 screw ((K)LX-HZ0063TAFN), and 2 screws ((P)XiPSF17P04000).
- Raise the claw in the direction of the arrow, and pull out the cabinet B ass'y to detach the BtoB of the camera operation unit. (If the cabinet B ass'y is pulled out by force, the FPC may be cut off. Therefore, pull it our gently.)

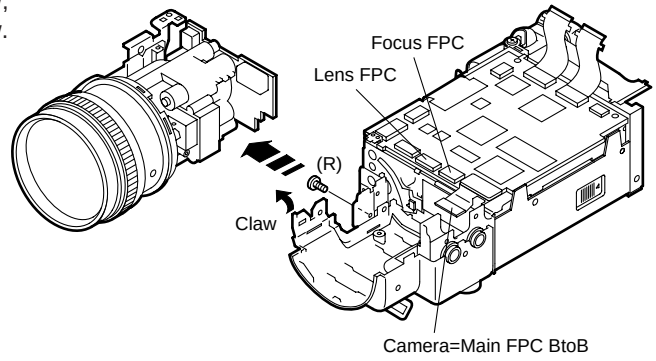
3.

- Detach the 3 main=sub FPCs (1, 2 and 3) and 1 microphone connector.
- Remove the 1 screw ((R)XiPSN17P03000) and 2 screws ((N)XiPSF17P02000), and pull out the sub PWB in the direction of the arrow.



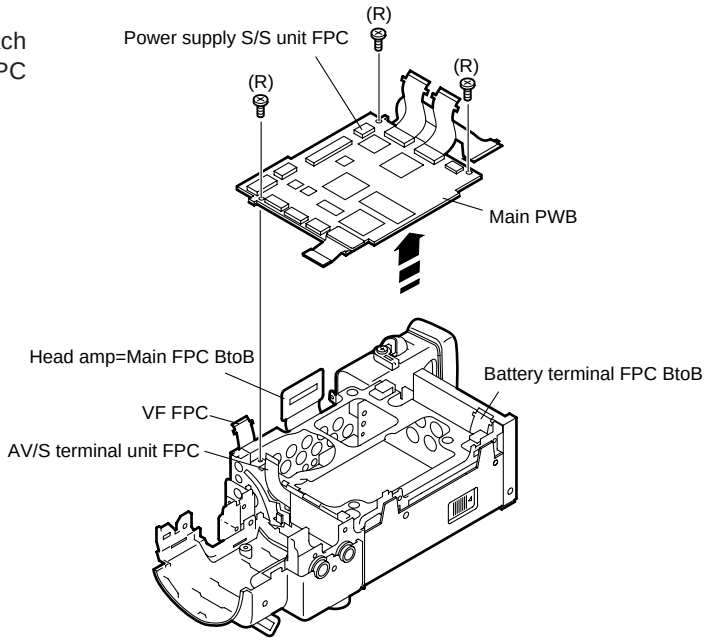
4.

- Detach the lens FPC, focus FPC, and camera=main FPC BtoB.
- Remove the 1 screw ((R)XiPSN17P03000), raise the claw, and then pull out the lens section in the direction of the arrow.



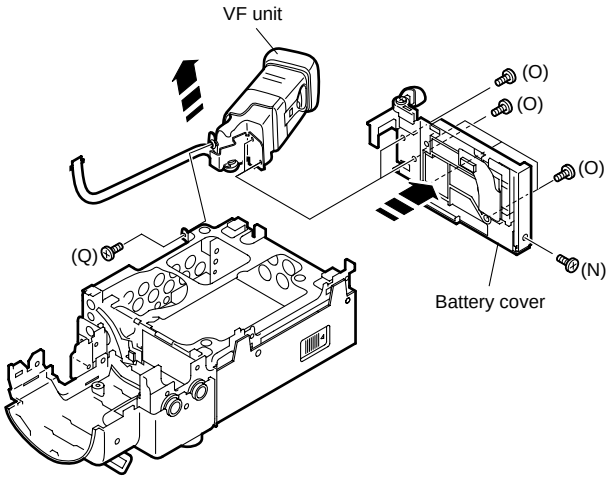
5.

- Detach the head amp=main FPC BtoB, battery terminal FPC BtoB, AV/S terminal unit FPC, and power supply S/S unit FPC.
- Remove the 3 screws ((R)XiPSN17P03000).
- Pull out the main PWB in the direction of the arrow to detach the VF FPC. (If the main PWB is pulled out by force, the FPC may be cut off. Therefore, pull it our gently.)

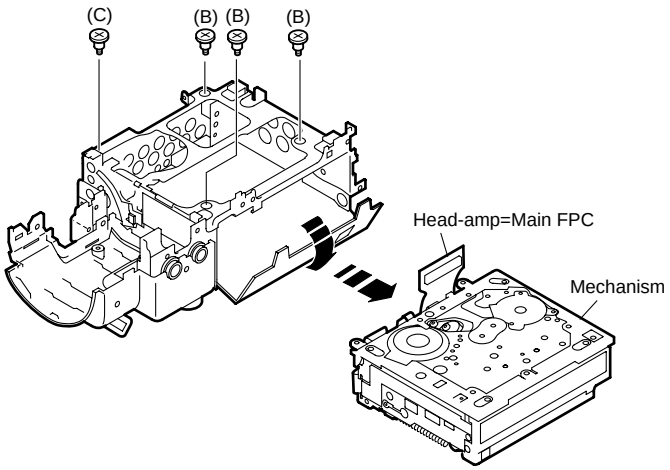


6.

- Remove the 1 screw ((Q)XiPSN17P02000) and 5 screws ((O)XiPSF17P03000), and pull out the VF unit in the direction of the arrow.
- Remove the 1 screw ((N)XiPSF17P02000) to detach the battery cover.

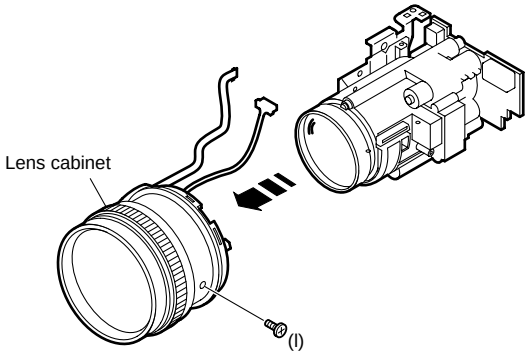


7.



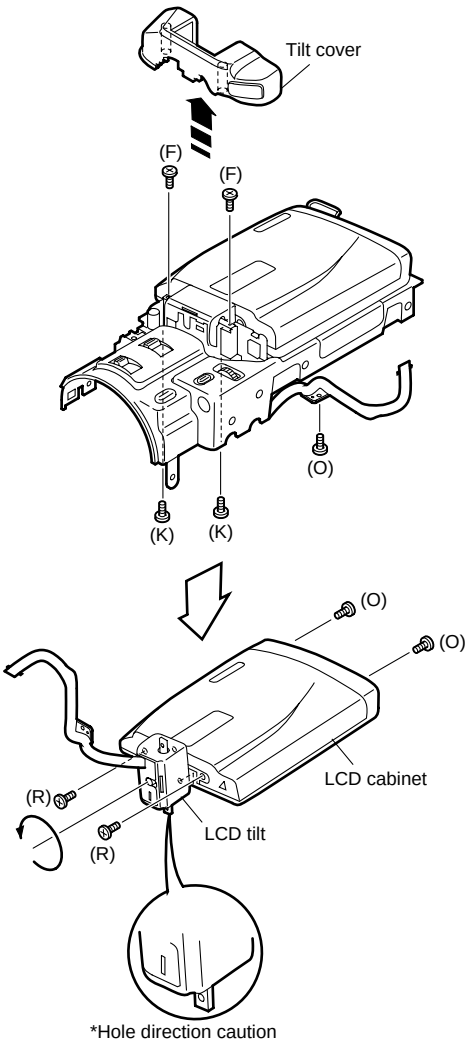
- Remove the 3 screws ((B)LX-BZ0232TAFD) and 1 screw ((C)LX-BZ0245TAFF).
- Open the cassette lid, and pull out the mechanism through the opening in the direction of the arrow.

8.



- Remove the 1 screw ((I)LX-HZ0050TAFN), and pull out the lens cabinet in the direction of the arrow.

9.



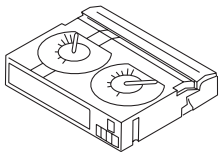
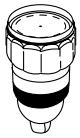
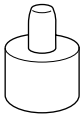
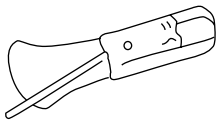
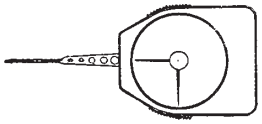
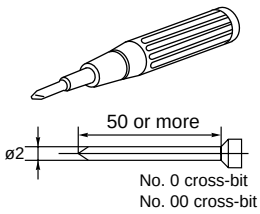
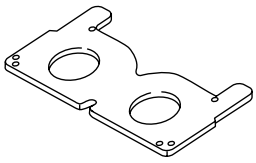
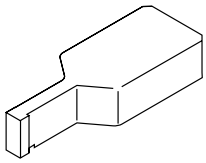
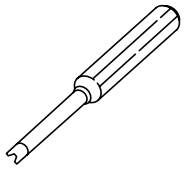
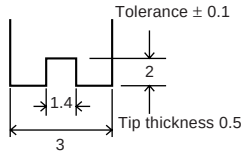
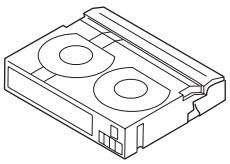
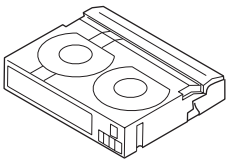
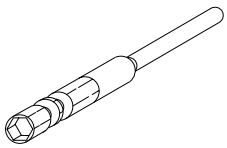
- Remove the 2 screws ((K)LX-HZ0063TAFN) and 1 screw ((O)XiPSF17P03000) to detach the tilt cover.
- Remove the 2 screws ((F)LX-HZ0017TAFF) to detach the LCD cabinet.
- Turn the LCD tilt to verticalize it to the LCD cabinet.
- Remove the 2 screws ((O)XiPSF17P03000) and 2 screws ((R)XiPSN17P03000).

4. MECHANISM ADJUSTMENT JIGS AND PARTS

4-1. Mechanism check adjustment jigs

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

<Note: The entries of list>

 1. PB-use cassette Torque meter 2. 9DASD-1015 3. DB * 1mN·m/1.5mN·m	 1. Torque gauge 2. JiGTG0045 3. CN * For use in VS-REW winding torque measurement.	 1. Torque gauge head 2. 9EQTGH-DH5000 3. BW * For use with the torque gauge listed left.	 1. Tension gauge 4N 2. JiGSG0400 3. BK * For measurement of pinch roller pressure.	 1. Dial tension gauge 2. 9DAPTG-10-10W 3. CA * PTG-10
 1. Torque screwdriver 150mN·m 2. JiGTD1500RTDH 3. CB	 1. Master plane 2. 9EQMP-VLPD1 3. CL * For checking reel base height.	 1. Height adjustment jig 2. 9DAHG-PD1 3. BZ * For height adjusting.	 1. Height adjustment screwdriver 2. 9EQDRiVER-DH5 3. BC * For guide roller adjustment.	* For Tu guide adjustment. * For T roller adjustment. * Bit shape (see figure below). 
 1. Alignment tape – (I) 2. VR3-GAZXS 3. CF * For tape running adjustment.	 1. Alignment tape – (II) 2. VR3-JPZQS 3. CG * For SW point adjustment. * 90ADVC-TAPE PALcan use, too.	 1. For hexagon nut opposite side 3mm bit. 2. 95CM22001 3. BL * For S guide hexagon nut installation.	<Miscellaneous> (1) Slide caliper (2) Precision screwdrivers (Phillips head and slotted) (3) Radio needle-nose pliers (4) Tweezers	

4-2. Parts for regular periodic inspection and maintenance

Configuration
1. Name
2. Part No.
3. Code
* Model, Uses Remarks

<Note: The entries of list>

1. Oil Cosmo Hydro HV22 2. 9EQ-Oil-HV22 3. AE * Cosmo Petroleum K.K.	1. Cleaning paper 2. JiGDUSPER 3. AP * DUSPER ∑ (SIGMA) (ozu Co., LTD.)	1. Grease: Moly Coat YM-103 2. 99FGREASE-YM103 * Dow corning	1. Cleaning liquid: industrial-use ethyl alcohol * Commercially available item
		1. Screw lock (1401B) * Three Bond	1. Extremely thin cotton swab * Commercially available item

<How to make jigs for mechanism checking and adjustment>

(1) Reel hub for back tension measurement (Fig. 1)
   1) Obtain a commercially available cassette tape reel hub. (Disassemble the cassette tape and remove the tape from the reel hub.)
   2) Paste one end of a string (about 20cm long) to the reel hub with (for example) cellophane tape.
   3) Paste the weight of about 0.21N on the upper side reel hub.

(2) String for use in pinch roller snap-fit force measurement (Fig. 2)
   1) Obtain an approximately 20cm length of commercially available string.
   2) Tie the 2 ends together to form a loop.

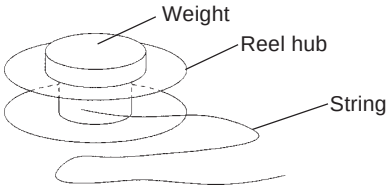


Fig. 1

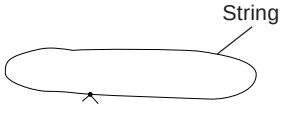


Fig. 2

5. INSPECTION AND MAINTENANCE ITEMS AND INTERVALS

In order to keep the mechanical section always in good condition, perform the following inspection and maintenance at regular intervals.
In addition, after repair, perform the following maintenance items regardless of how long the user has been using the unit.

5-1. List of inspection and maintenance items

○ • • • Replace. □ • • • Clean. △ • • • Lubricate. ★ • • • Check.

	Inspection and maintenance location	Time of use (h) 500	1,000	1,500	2,000	3,000	Symptoms that indicate need for maintenance	Remarks
Tape running system	Tape running section (see section 7-3)	□	□	□	□	□	• Block-type noise • Head hole clogging • Tape damage	**Note:** Replace the drum ass'y if the video head is cleaned but the envelope still does not appear. (When the envelope is normal, refer to "10. USEFUL TIPS".)
	Drum section, Video head (see section 7-3)	□	□	□	□	□		
		<Rollers> • Replace if there is anything abnormal in the rotation, or if there is run-out (that becomes large). <Other than the above> • Clean the section that contacts the tape (especially the lower drum helical section). Use the specified cleaning liquid.						
Drive system	Timing belt	—	★○	—	★○	★○	• The tape fails to run. • The tape becomes slack. • Block-type noise • Abnormal noise	• Replace if there is anything abnormal.
	Pinch roller	□	□	□	□○	□		
	Capstan motor	—	○	—	○	○		
	Swing arm S reel base, Tu reel base	—	★○	—	★○	★○		
	Center pulley shaft Intermediate pulley shaft Swing arm boss Intermediate gear A shaft, Intermediate gear B shaft	—	△	—	△	△	• Abnormal noise	• Lubricate with oil. [Oil] Cosmo Hydro HV22 **Note:** Apply oil to the shaft, then wipe lightly with a cloth.
	Loading motor Mode switch	—	★○	—	★○	★○	• Cannot eject. • Fails to enter a mode.	• Replace if anything is abnormal (including the noise).
Performance checks	Abnormal noise	★	★	★	★	★	• The tape fails to run. • The tape becomes slack. • Tape damage • The play-back image is abnormal.	• Replace any part that fails to perform within the standard.
	PB · VS/R winding torque	—	★	—	★	★		
	PB · VS/R · loading back tension Tu reel base ratchet torque S reel base no-load torque	—	★	—	★	★		

[Oil] Cosmo Hydro HV22 [Screw lock] Three Bond 1401B
[Grease] Moly Coat YM-103 [Cleaning liquid] Industrial-use ethyl alcohol

5-2. Precautions

(1) When replacing any part, always replace the cut washer that was removed with a new one.
(2) This mechanism does not have control adjustment. If the control cannot be set as required, clean and or replace parts.
(3) On the oil
  a) Always use the specified oil. (Using another kind of oil can cause various kinds of trouble.)
  b) Always use clean oil, without any mixed-in dirt, to lubricate bearings. (Using oil with dirt mixed in can cause the bearings to wear or to stick.)
  c) One drop of oil is the amount shown in the Fig. 1, on the point of a pin.
(4) Perform circuit repair, tape running adjustment, etc. with the cassette controller assembly attached to the mechanism.
(5) When operating the mechanism separately, apply voltage to the loading motor. However, the terminal voltage must be DC3V~4V.
  (When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause a trouble.)
  (Forcing the gears to turn by hand entails danger of breakage.)
  If the mechanism is separated from the unit, the capstan motor may rub and be damaged if spacing under the mechanism is inadequate.
(6) To install the cassette controller, push section A in the Fig. 2. Do not push anything else.
(7) Do not deform any of the mechanical parts.

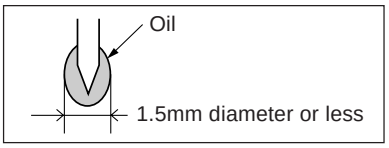


Fig. 1

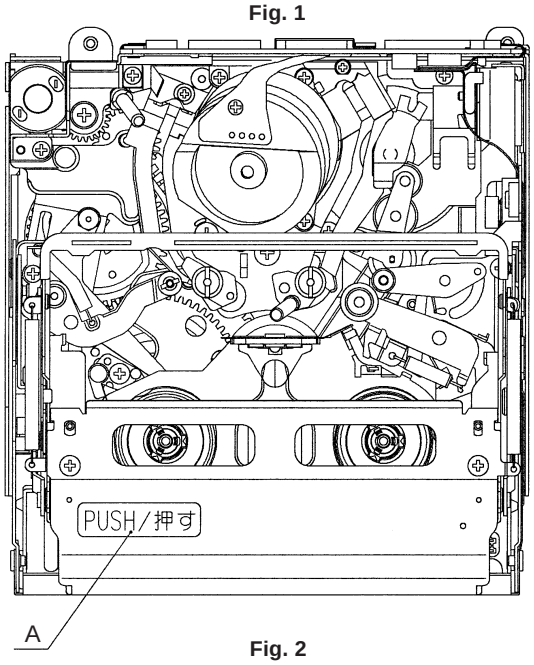


Fig. 2

6. MECHANICAL ADJUSTMENTS AND CHECKS

The items discussed here relate to general on-site servicing (field servicing). Adjustments and replacements that require sophisticated facilities, jigs and technology are omitted.
In addition, in order to maintain the characteristics that the unit has when it is new, not only are inspection and maintenance necessary, but it is absolutely necessary that, for example, the tape not be damaged, and always use jigs for adjustments that require them.

<Precautions>
(1) Always set the power supply and state of the unit as follows Notes for mechanism adjustments and checks.
- AC adapter used, with cassette controller assembly
- AC adapter used, without cassette controller assembly (Independent Mechanism)
- DC3V, without cassette controller assembly (Independent Mechanism)

(2) When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause a trouble.
(3) Always run the tape with the cassette controller assembly attached.

6-1. Checking the playback (recording) winding torque

AC adapter used, with cassette controller assembly

(1) Set the torque cassette with the cassette controller assembly attached, then, in SP recording mode (playback mode if a signal has already been recorded in SP mode on the tape), confirm that the torque on the winding side is within the standard.
<Winding torque standard in record (playback) mode>
(If there is torque ripple, read the center value.)
0.70 +0.4/-0.3mN·m, ripple 0.4mN·m or less

6-2. Checking the rewinding playback (VS-REW) winding torque

AC adapter used, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, press the DOWN switch, using the adhesive tape and referring to 8-3, operate in the TEST mode (T01) to rewind, and set the rewinding playback (VS-REW) mode.
(2) Set the torque gauge on the S reel base, press the front end of tension post with your finger in the arrow A direction so as to ascertain that the winding torque is as specified. (Check without rotating the torque gauge.)
<Rewinding playback (VS-REW) winding torque standard>
(If torque ripple exists, read its center value.)
1.6 ± 0.6mN·m, ripple 0.5mN·m or less
(3) After checking the winding torque remove the torque gauge, and remove the adhesive tape used in item (1) above (refer to 8-3). The STANDBY mode is set automatically.

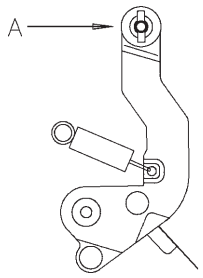


Fig. 1. Removal of tension band when measuring the rewinding playback (VS-REW) winding torque

6-3. Checking of reel base height

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly (refer to 8-2).
(2) Referring to 8-1, apply DC3V to the loading motor and put the system into playback mode.
(3) Taking adequate care so that the master plane does not contact drum, running parts (guide roller, etc.), or the MIC contacts. Fit the master plane holes to the 2 guides (A and B) in Fig. 2.
(4) Confirm that the heights of the S reel base reel receiving surface and the Tu reel base reel receiving surface below the master plane top surface are within the set values, using, for example, a slide calliper (Fig. 3).
When checking the S reel base height, press the front end of tension post in the arrow A direction with your finger to release the tension band, and then check the height in this state (Fig. 1).
(5) If the height is not within set values, replace the washer under the reel base, and adjust as specified.
Note: After the adjustment, make sure that the reel bases rotate smoothly.

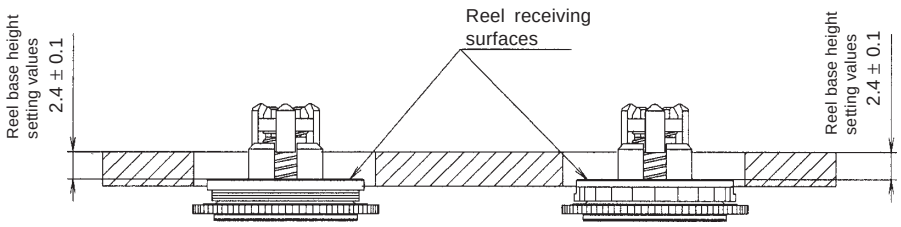


Fig. 3

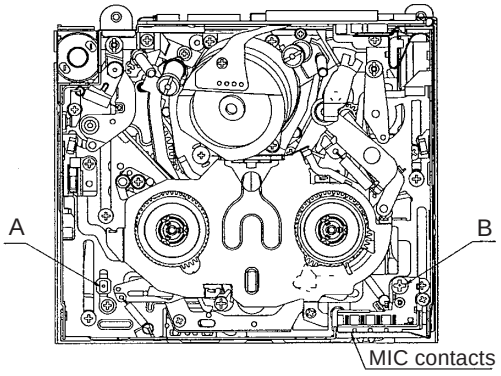


Fig. 2

6-4. Back tension torque check and adjustment in record (playback) mode

AC adapter used, with cassette controller assembly

(1) Checking

Set the torque cassette (SD-1015), and make sure in the SP record mode that the supply side torque is within the standard shown below (or in the playback mode for the tape on which the signal has been SP-recorded).

<Standard>

(If torque ripple exists, read its center value.)

0.7 ± 0.1mN·m

(2) Adjustment (Fig. 4)

If the value is out of standard range, adjust, using the screw 1 shown in Fig. 4.

1. Loosen the screw 2 slightly.
2. Adjust to turning the screw 1. When back tension is too high, turn the screw 1 counterclockwise (CCW).
   When back tension is too low, turn the screw 1 clockwise (CW).
3. After adjustment fix the angle with the screw 2. (At this time take care so as to prevent excessive tightening.) Apply Screw Lock to the screw 1.

<Caution>

Screw tightening torque: 0.04N·m

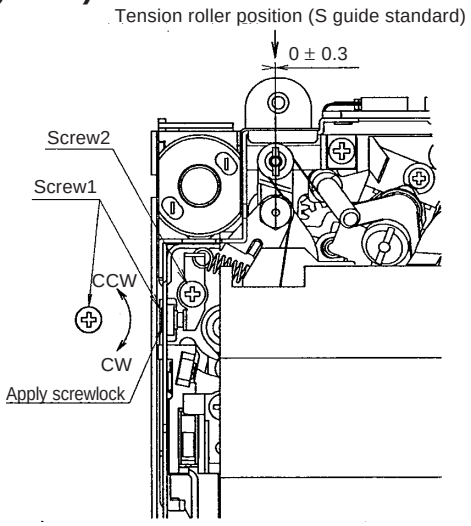


Fig. 4. Check (tape exists)

6-5. Checking and adjustment of tension roller position in record (playback) mode

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Checking

Before winding the 60-min tape make sure that the tension roller is in the same position as S guide as shown in Fig. 4.

If not, take out the tape and adjust in the following procedure.

(2) Adjustment (Fig. 5)

1. Set the playback mode without loading the tape.
2. Loosen the screw 3 slightly (to such an extent that the tension band holder 4 can be moved).
3. If the tension roller is inside from the specified position, shift the tension band holder 4 in the arrow Ⓐ direction. If the tension roller is outside, shift the tension band holder in the arrow Ⓑ direction, and fix with the screw 3. (Proper shift must be 0.2 to 0.6mm outside from the specified position.)
4. Check the position by the procedure described in item (1) Checking above.
5. If the position is not specified position, adjust again.

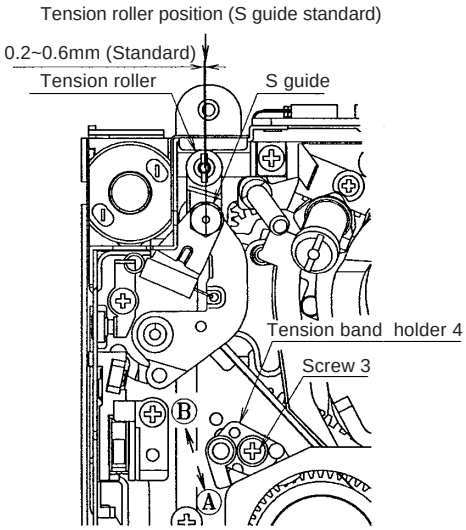


Fig. 5. Position adjustment (tape does not exist)

6-6. Checking of supply S reel base no-load torque

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into L. start mode (refer to 8-1).

(2) Move the swing arm toward the Tu reel base side.

Be careful not to cause damage to the gears and other parts in the process. (Fig. 6)

(3) Set a back tension measurement reel hub on the S reel base.

(4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

<FF back tension standard>

(If the tension fluctuates, read its center value.)

30mN or less

6-7. Checking of loading back tension

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into L. start mode.
(refer to 8-1)

(2) Move the swing arm toward the S reel base side. Be careful not to cause damage to the gears and other parts in the process. (Fig. 7)

(3) Set a back tension measurement reel hub on the Tu reel base.

(4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

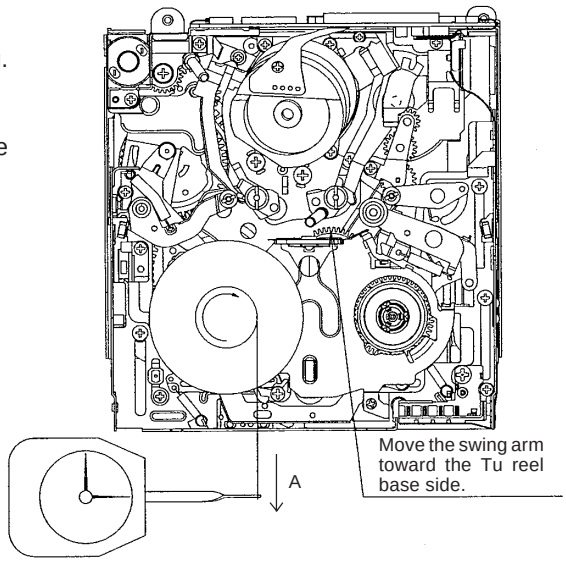


Fig. 6. S reel base no-load torque measurement method

<REW back tension standard>

(If the tension fluctuates, read its center value.)

15 ± 12mN

6-8. Checking of winding Tu reel base ratchet torque

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into standby mode. (refer to 8-1)

(2) Move the swing arm toward the S reel base side.
Be careful not to cause damage to the gears and other parts in the process. (Fig. 8)

(3) Set a back tension measurement reel hub on the Tu reel base.

(4) Using a dial tension gauge, pull the string in the A direction, then confirm that the tension is within the standard.

<Winding Tu reel base ratchet torque standard >

(If the tension fluctuates, read its center value.)

100mN or less

6-9. Checking of rewinding playback (VS-REW) back tension

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Remove the cassette controller assembly, then apply DC3V to the loading motor and put the system into rewinding playback (VS-REW) mode. (refer to 8-1)

(2) Move the swing arm toward the S reel base side.
Be careful not to cause damage to the gears and other parts in the process.

(3) Set a torque gauge on the Tu reel base.

(4) Turning the torque gauge to counterclockwise (1 turn for 3 seconds), then confirm that the torque is within the standard.

<Rewinding playback (VS-REW) back tension standard value>

(If the tension fluctuates, read its center value.)

0.70 +0.6/-0.3mN·m

6-10. Checking of pinch pressing force

DC3V, without cassette controller assembly (Independent Mechanism)

(1) Set the pinch roller pressing force measuring thread on the pinch lever (position A , Fig. 9).

(2) Set the mechanism to the playback mode, press the pinch roller against the capstan shaft.

(3) Fit the tension gauge to the pinch roller pressing force measuring thread, pull in the arrow B direction shown in Fig. 11 to separate a little the pinch roller from the capstan shaft.

(4) Gradually return the pinch roller, and when the pinch roller contacts parallel the capstan shaft, read the value (see Fig. 10) to make sure that the value conforms to the standard shown below.

<Standard>

1.8 +0.3/-0.5N

<Caution>

After making this measurement, quickly release the system from playback mode and remove the pinch roller from the capstan shaft. (If the pinch roller is left fitted onto the capstan shaft for a long time, the pinch roller will be deformed.)

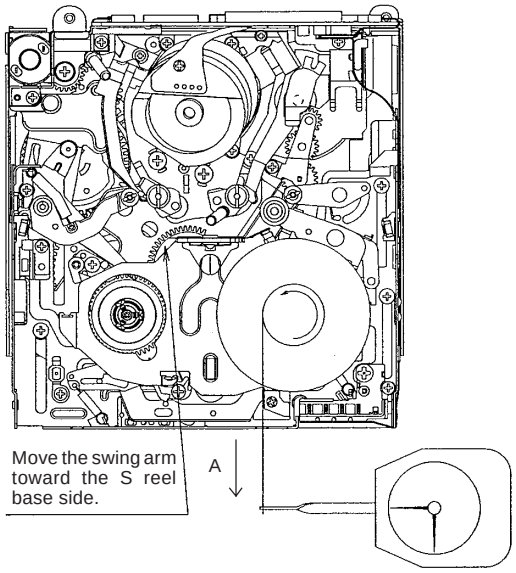


Fig. 7. Loading back tension measurement method

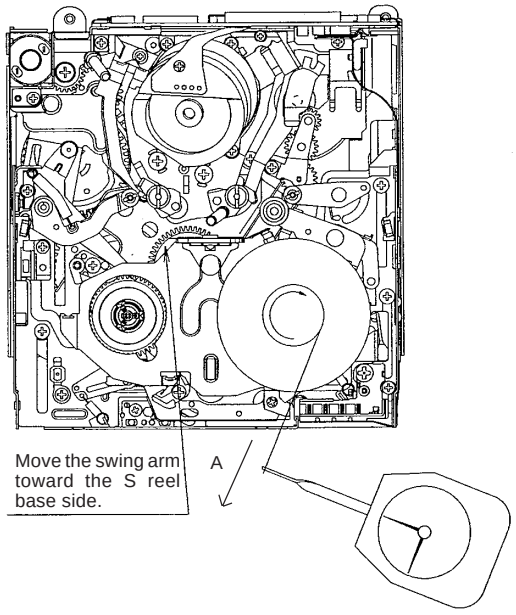


Fig. 8. Winding Tu reel base ratchet torque measurement method

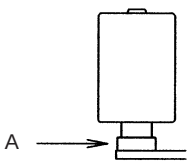


Fig. 9

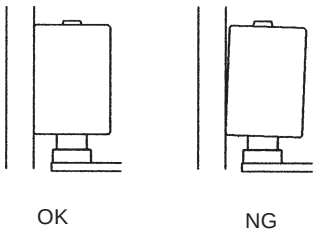


Fig. 10

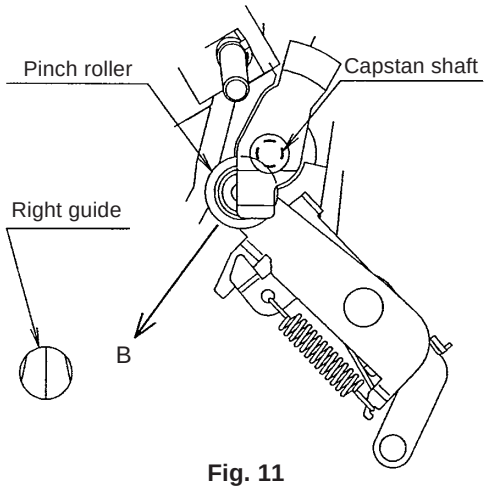


Fig. 11

7. TAPE RUNNING ADJUSTMENT

7-1. Adjustment locations

<Replacement parts>
· T roller, arm
· Tu guide, arm
· Slide chassis

→ Adjust the height of only replaced parts with the adjusting jig. Adjustment procedure 7-2

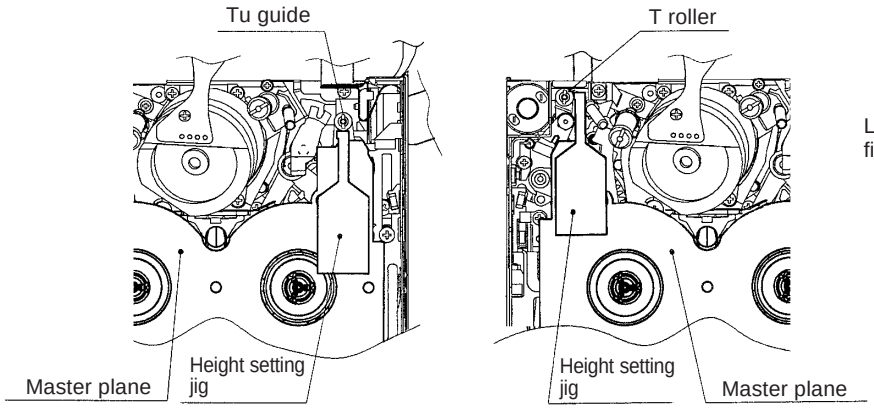
<Replacement parts other than those shown above>
· S guide
· Pole base
· Guide roller
· Drum assembly
· Capstan motor, etc.

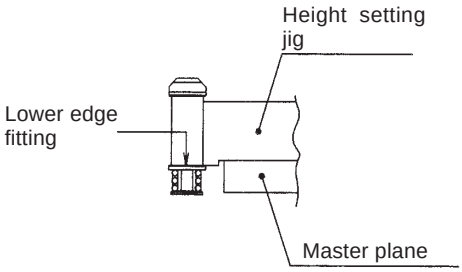
→ Height presetting is not necessary.

→ Cassette controller installation → Running adjustment preparation Adjustment procedure 7-3 → Running rough adjustment Adjustment procedure 7-4 → Running final adjustment Adjustment procedure 7-5

7-2. Running height adjustment

· After replacement of T roller or Tu guide adjust the height . (Adjust only the replaced parts.)
· After height adjustment do not turn the T roller. If crease is found on the tape of Tu guide, remove the crease by rotating. (As for details refer to the “Running rough adjustment”.)
· After height adjustment of T roller or Tu guide, apply Screw lock to an end of shaft. (After replacement of S guide apply Screw lock to same point, too.)





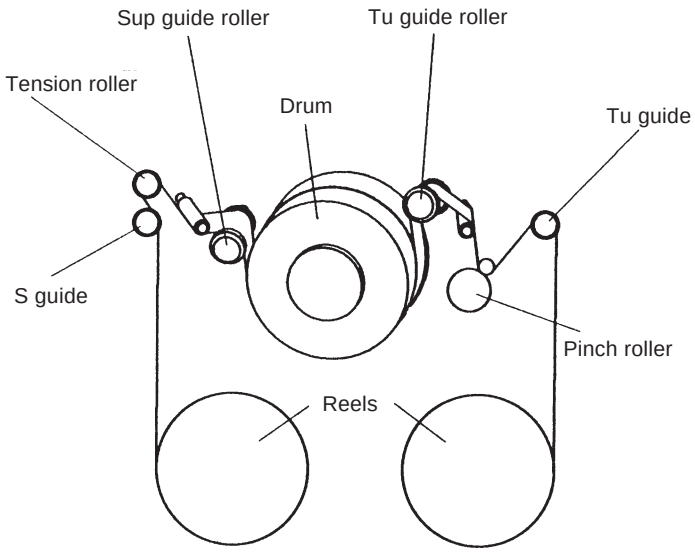
Fit height the par on low edge fitting.
After setting adjustment jigs, turn T roller counterclockwise to 315°.

7-3. Preparation for tape running adjustment

Meters, jig… Oscilloscope, Adjustment remote control, Height adjustment screw driver, Alignment tape (for tape running adjustment, for switch point adjustment), Master plane, Height adjustment jig.

<Method and description>

(1) Clean the tape running surface (especially, adequately clean the drum surface and the lower drum helicam surface).
(2) Attach the cassette controller.
(3) Connect an oscilloscope to each TP on the relay circuit board.
(4) Turn the AC adapter power ON.
(5) Using the adjustment remote control unit, put the system TEST mode T-05.
(6) Replay the alignment tape for running adjustment, and make sure that the tape is running in the SP mode.
(7) Check the oscilloscope playback envelope, then, at +1/4 shift and -1/4 shift, check whether all of it is flat. If it is not, perform the following adjustment so that it becomes flat.
(Each time you push the PLAY key, the shift will change;
+1/4 shift → Normal → -1/4 shift → Normal, in order.)



7-4. Running rough adjustment

(With cassette controller)

1) Su, Tu guide roller height adjustment

<Method and description>

(1) Loosen the guide roller lock screw, then tighten loosely so that the roller turns easily.
(2) Replay an alignment tape, and adjust the Sup, Tu guide roller so that the envelope sides of entrance and exit are flat.
(3) Perform ± 1/4 shift, then, as in the above case, adjust until the envelope becomes flat.
* If running is difficult for the entrance changed, turn the T roller to counterclockwise 180°. (refer to Fig. 1)

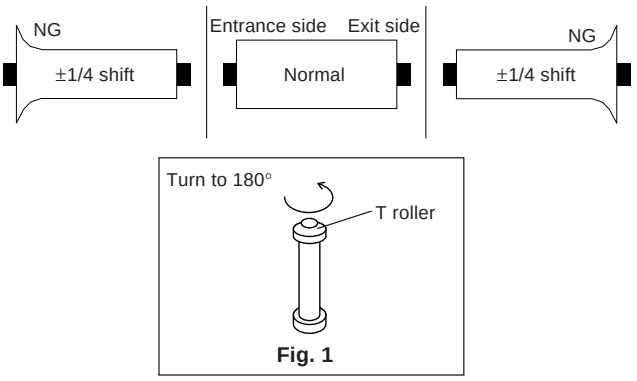
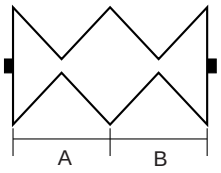


Fig. 1

2) Check of V/SR envelope wave form

<Method and description>

(1) Confirm that the envelope waveform peaks in V/SR mode are uniform.
(2) If they are not uniform, fine-adjust the guide roller and the Tu guide.

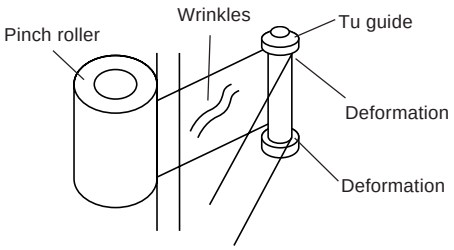


Adjust so that A ≒ B.

3) Check of tape wrinkles

<Method and description>

(1) Check that the tape is not distorted between the Tu guide and pinch in the PB mode and the V/SR mode.
⇨If crease is found, make an adjustment in the range of ±180°.
⇨After adjustment apply Screw Lock.



4) Check the rising time of the envelope wave form

<Method and description>

(1) Check the rising time of the envelope when switching from V/SR mode to PB mode. (Within 5 sec)
(2) Check the rising time of the envelope when switching from STOP mode to PB mode. (Within 5 sec)

7-5. Final running adjustment

(With cassette controller)

1) Adjustment of Sup and Tu guide roller height

<Method and description>

(1) Perform ± 1/4 shift, then if the envelope wave's ratio of MAX. to MIN. are 60% or less, adjust again the height of guide roller. (Refer to Fig. 2)
(2) Finally adjust the lock screw of Sup and Tu guide roller.
(3) Once perform unloading and then loading to set the PB mode, and make sure that the envelope waveform does not change.

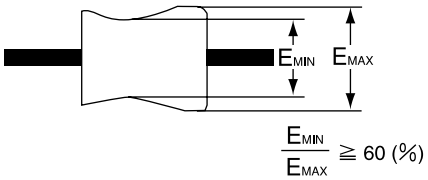


Fig. 2

2) Adjustment of playback SWP

<Method and description>

(1) Playback the alignment tape for switch point adjustment.
(2) Perform SWP automatic adjustment with adjustment remote control.

* When replacing the mechanism and drum, adjust the phase and equalizer using the adjustment remote control. (Refer to "9. ADJUSTING THE ELECTRICAL CIRCUITS".)

8. MECHANICAL SECTION ASSEMBLY AND PARTS REPLACEMENT (DISASSEMBLY AND REASSEMBLY)

Mechanical section disassembly and reassembly are explained in this section.
For removal of the cabinet, etc., refer to **3. DISASSEMBLY OF THE SET.**

<Precautions>

1. Always replace cut washers that have been removed, for example in parts replacement, with new ones.
2. When reassembling, be careful not to allow screws, washers or foreign matter to enter. They can cause mechanical misoperation.
3. Use the cleaning liquid, oil, grease and screw lock that are specified below. Use of any other kind can cause mechanical misoperation.

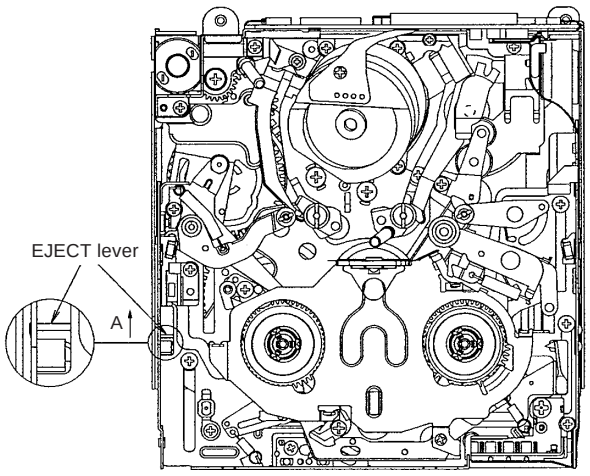
Oil: Cosmo Petroleum : Cosmo Hydro HV22	Screw lock: Three Bond :1401B
Grease: Dow Corning : Moly Coat YM-103	Cleaning liquid: Industrial-use ethyl alcohol

8-1. On the mechanical modes

When operating the mechanism separately, apply DC3~4V to the loading motor.
(When the mechanism is connected to the main PWB, do not apply external voltage to the loading motor. It may cause operational problems.)

(1) EJECT mode

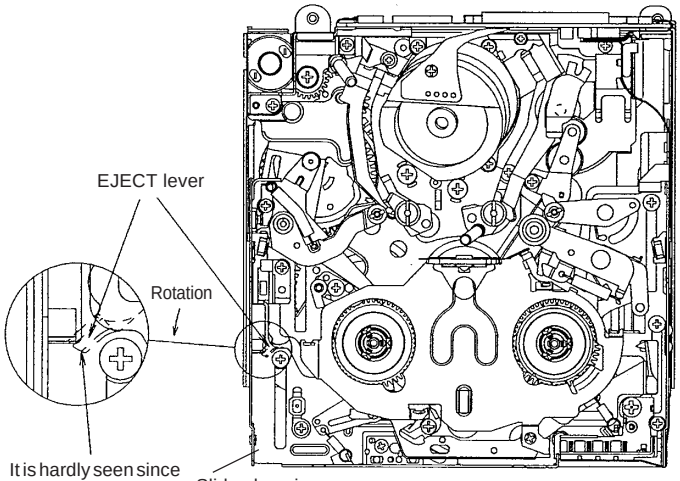
The mechanism position to take out the cassette where the EJECT lever is extremely shifted in the A direction. (It is impossible to lock the cassette controller assembly in this mode.)



EJECT mode diagram

(2) STANDBY mode

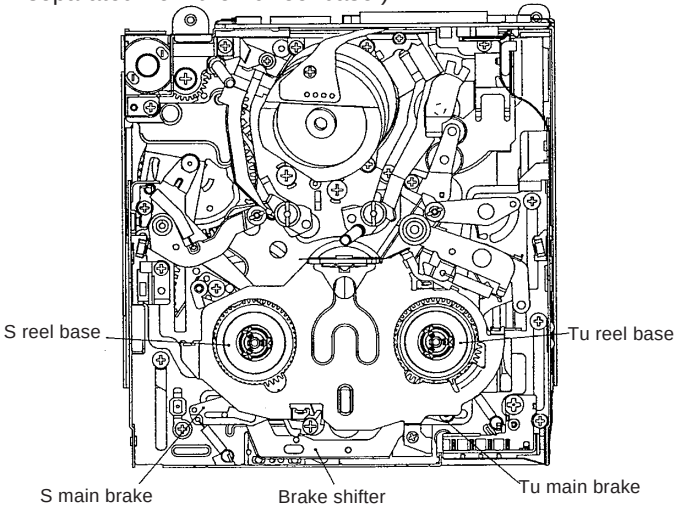
The mechanism position to set the cassette where the slide chassis is at the farthest position from the drum and the EJECT lever is in counterclockwise rotated position (position where the cassette controller assembly can be locked).



STANDBY mode diagram

(3) LOADING START mode

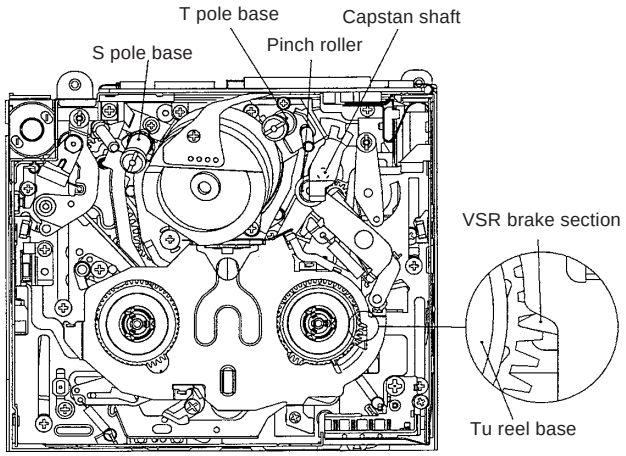
This is the mode where the tape is wound around the winding reel when a cassette with visible wind start leader tape is loaded. (The brake shifter moves to the left, the S main brake is separated from the S reel base and the Tu main brake is separated from the Tu reel base.)



LOADING START mode diagram

(4) REWINDING (VSR) mode

The mechanism position to rewind the tape (fast rewinding playback). The S and T pole base is pressed, the pinch roller is pressed to the capstan shaft, the brake shifter VSR brake section engages with the Tu reel base gear.

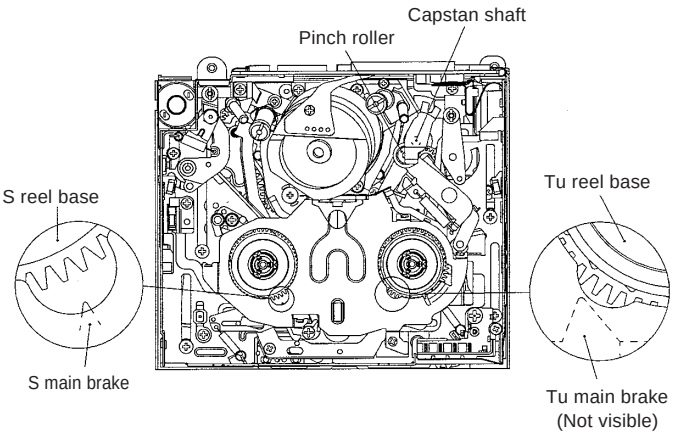


REWINDING (VSR) mode diagram

(5) PLAYBACK (RECORD, FF, VSF) mode

The mechanism position for playback, record, FF and fast feed playback.

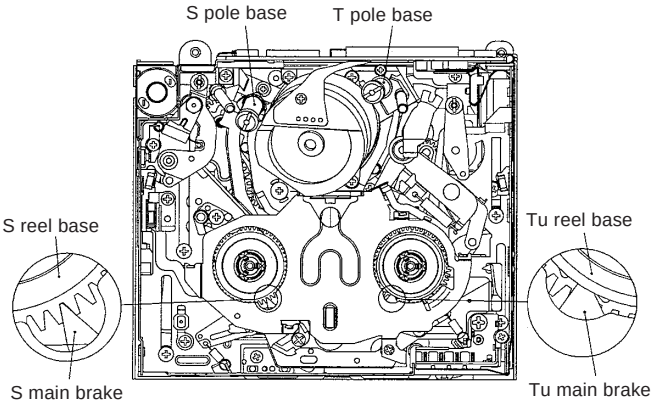
The pinch roller is pressed to the capstan shaft, and the S/Tu main brake is separated from the S/Tu reel base.



PLAYBACK mode diagram (RECORD, FF, VSF)

(6) STOP mode

The system is in the STOP (Rec Lock in CAMERA mode) position; the S and the T pole bases are snap-fitted to the drum base, the S brake is in contact with the S reel base, and the Tu brake is in contact with the Tu reel base.



STOP mode diagram

8-2. Cassette controller assembly

<Removing>

(1) Apply DC3V to the loading motor to enter the standby mode.
Press the lock lever in the arrow direction to raise the cassette controller. (See Fig. 1; Ⓐ or Ⓑ direction.)

(2) Turn the damper lever in the arrow Ⓒ direction to release the engagement of the damper bar. (See Fig. 2.)

(3) Remove two screws Ⓔ, and remove the down guide Ⓓ in the arrow Ⓕ direction. (See Figs. 3 and 4.)
Take care that the slide chassis is provided with the down guide positioning Ⓖ or Ⓗ.

(4) Slide the cassette controller in the arrow Ⓘ direction, remove the outer link shaft (both sides) toward the inside of the mechanism, and turn the cassette controller in the arrow Ⓙ direction. (See Fig. 5.)

(5) Slide the cassette controller in the arrow Ⓚ direction. (See Fig. 6.)

<Installing>

(1) Apply DC3V to the loading motor to enter the standby mode.

(2) For assembly, reverse the removing procedure (5) thru (2).
Tightening torque of two screws Ⓔ: 40±4mN.m

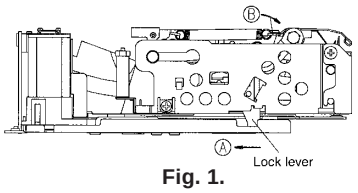


Fig. 1.

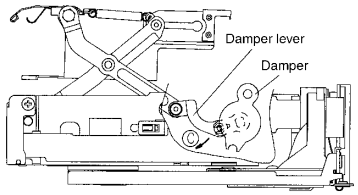


Fig. 2.

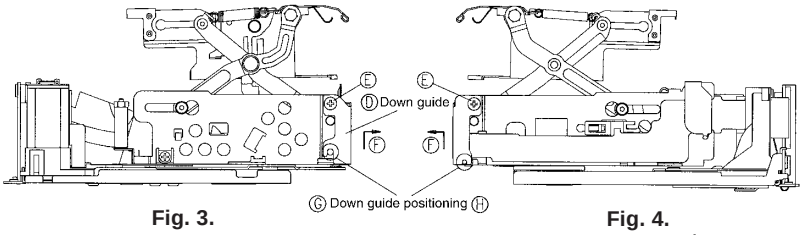


Fig. 3.

Fig. 4.

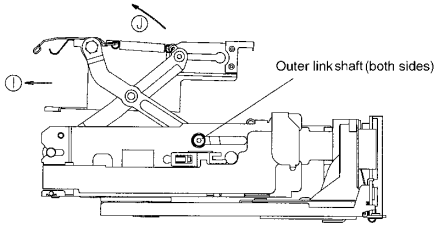


Fig. 5.

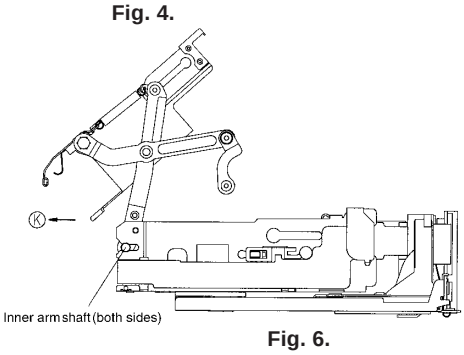


Fig. 6.

8-3. How to operate with the circuit board without the cassette controller assembly.

In this method, if the procedure is followed incorrectly there is danger of damaging the mechanism and the tape, so except in special cases, such as when measuring the VSR torque, do not perform this procedure. Normally operate this unit with the cassette controller assembly attached.
Be sure to follow each caution mentioned.

(1) Apply DC3 ~ 4V to the loading motor to enter the standby mode.
(2) Securely press the movable piece Ⓛ of the down SW with cellophane tape or similar to turn on SW. (Take care that the movable piece turns only in the shown arrow direction.)

Note: To enter REC mode, press the pin of the recognition switch Ⓜ.
(Unnecessary in other modes.)

(3) Set the test mode (T-01) with the adjustment remote controller without putting the tape, and the mechanical operation will become possible with the mode key.
(4) For ejection, remove the tape of (2).

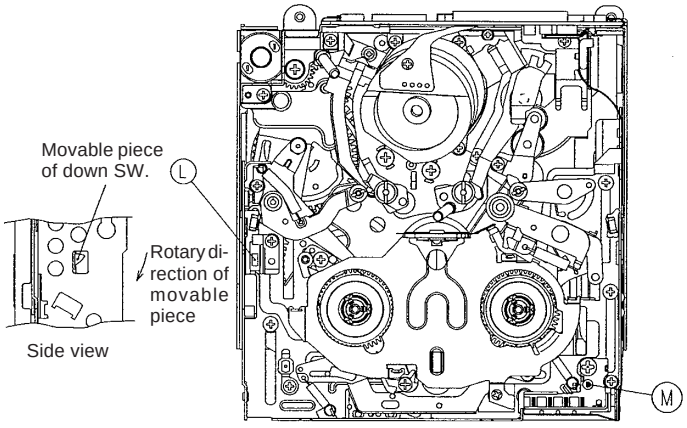


Fig. 7. LOADING START mode

8-4. Phase matching

Referring to Figs. 8 and 9, align the phase for the following parts.
(1) Eject lever (2) Eject control lever (3) Mode SW (4) Main cam (5) Sub cam
Note: Before disassembly, sufficiently check the marker position.
Note: When installing the joining gears, verify that the phase matching holes of the main cam and subcam are aligned to the hole of the chassis.
Note: After the phase is aligned, turn the mode SW with hand, and verify that it turns nearly one turn.
(After verification, return it to the original position.)

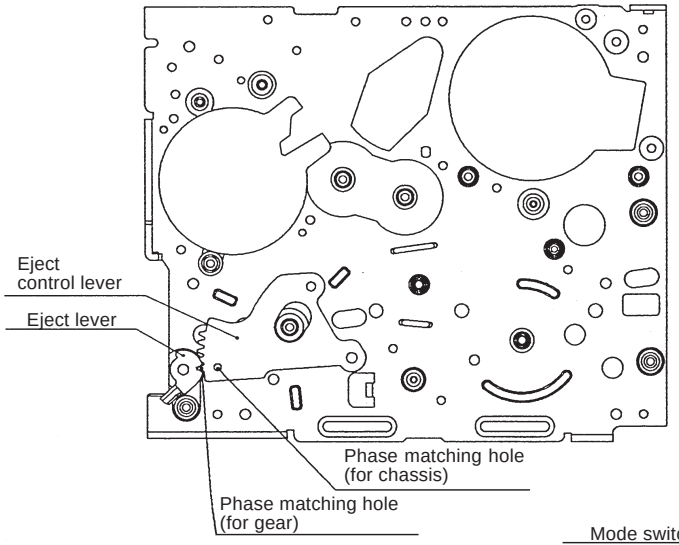


Fig. 8

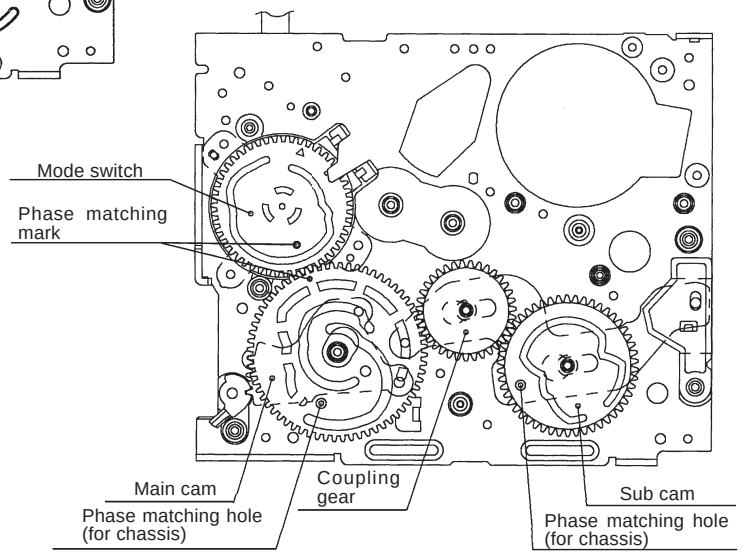


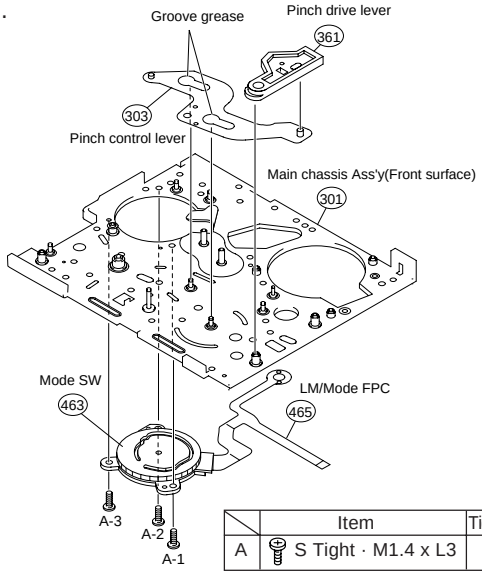
Fig. 9

8-5. Reassembly

8-5-1. Reassembly in side of the main chassis.

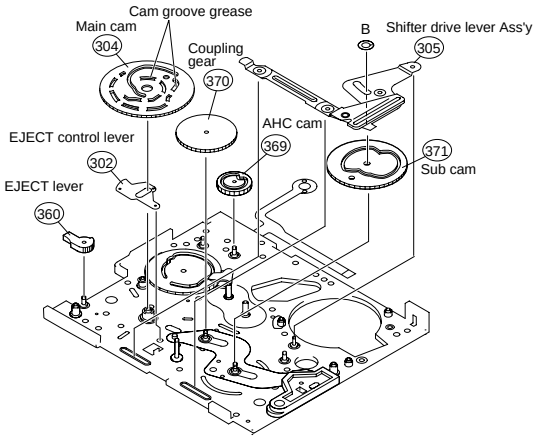
Note) Numbers before part names are given as a guide to the order of assembly.
As for greasing/oiling/cleaning places refer to the attached drawings (Grease/Oil application side of the main chassis).

1.



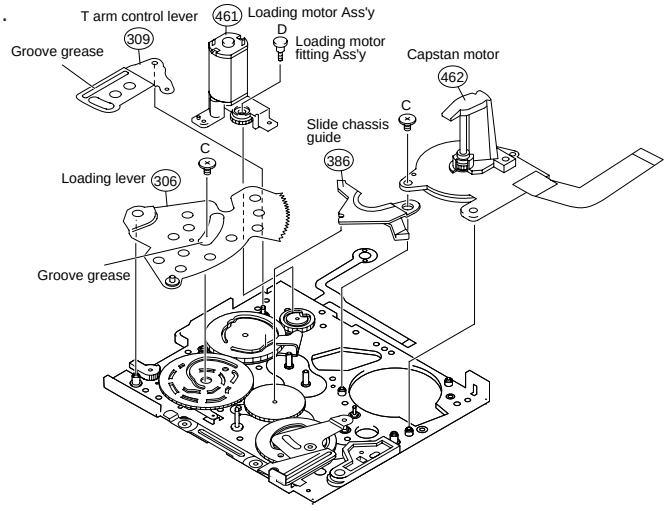
	Item	Tightening torque	Quantity
A	S Tight · M1.4 x L3	70mN·m	3

2.



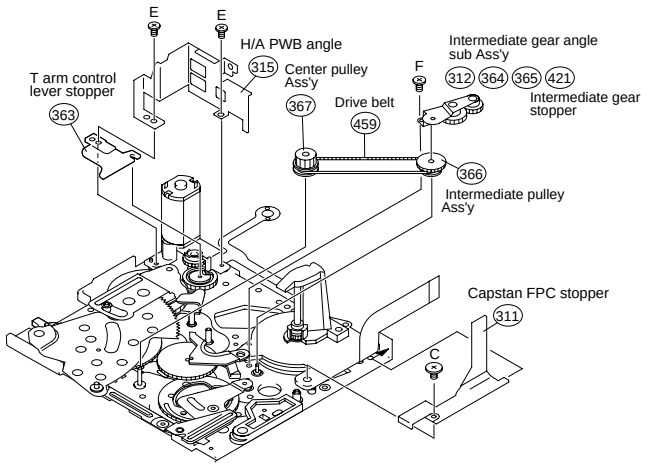
	Item	Tightening torque	Quantity
B	CWø1.2-ø3.0-t0.25	———	1

3.



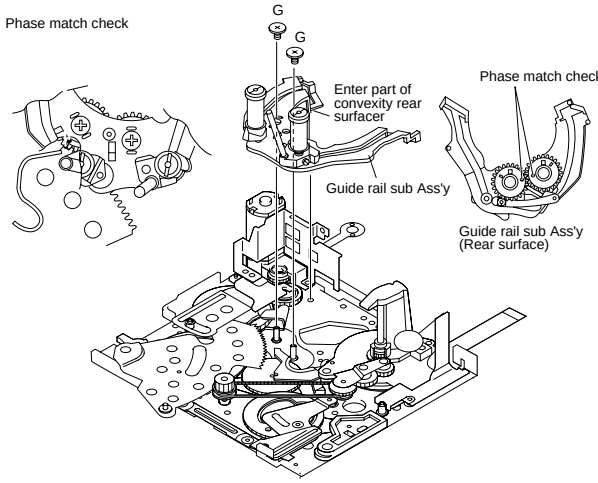
	Item	Tightening torque	Quantity
C	Special screw · M1.4 x L1.6	40mN·m	2
D	Special screw with step· M1.4 x L6.25	70mN·m	1

4.



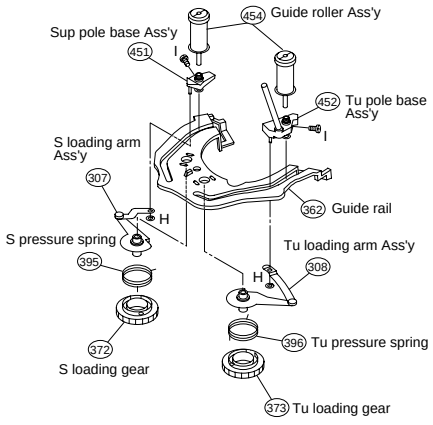
	Item	Tightening torque	Quantity
C	Special screw · M1.4 x L1.6	40mN·m	1
E	S Tight · M1.4 x L4	70mN·m	2
F	S Tight · M1.4 x L2	70mN·m	1

5.



	Item	Tightening torque	Quantity
G	Special head screw · M1.4 x L1.5	40mN·m	2

6.

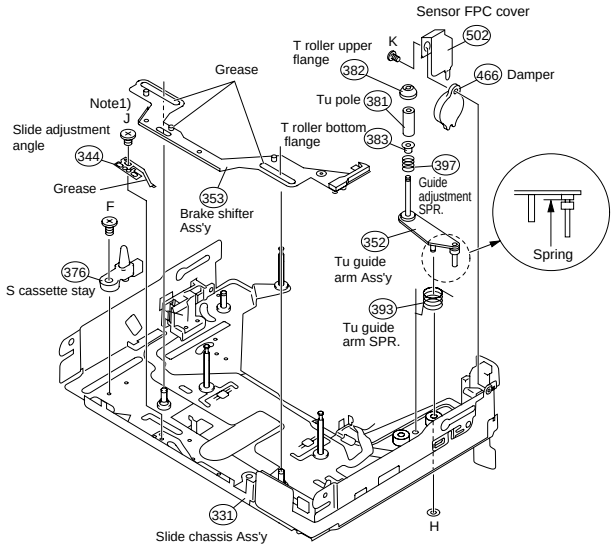


	Item	Tightening torque	Quantity
H	CWø0.7-ø2.2-t0.25	———	2
I	Special screw · M1.2 x L1.8	5mN·m (Tentative tightening)	2

8-5-2. Reassembly in side of the Slide chassis.

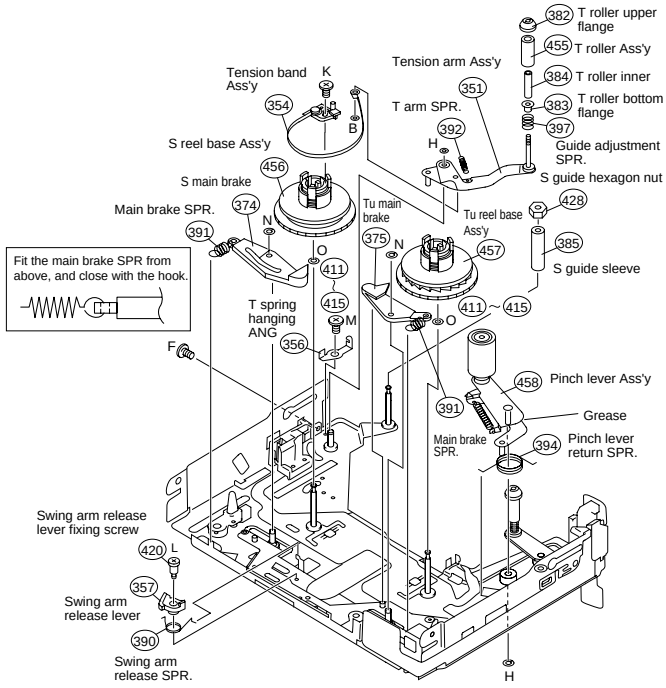
Note) Numbers before part names are given as a guide to the order of assembly.
As for greasing/oiling/cleaning places refer to the attached drawings (Grease/Oil application side of the slide chassis)

1.



	Item	Tightening torque	Quantity
F	S Tight · M1.4 x L2	40mN·m	1
H	CWø0.7-ø2.2-t0.25	———	1
J	Special screw · M1.2 x L1 Note 1: Use the No. 00 bit.	40mN·m	1
K	Special head screw · M1.4 x L2	40mN·m	1

2.



Note 1: Take care for scratch and hit mark on (381), (382), (383), (384) and (455). Handle the tension band with care against deformation.
Note 2: After lightly tightening (428) arm area against deformation, apply screw-lock on the tip of the shaft.

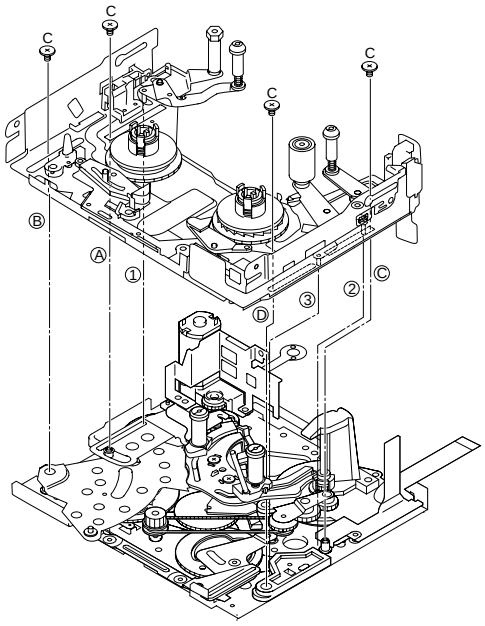
	Item	Tightening torque	Quantity
B	CWø1.2-ø3.0-t0.25	———	1
F	S Tight · M1.4 x L2	40mN·m	1
H	CWø0.7-ø2.2-t0.25	———	2
K	Special head screw · M1.4 x L2	40mN·m	1
L	Special screw with step· M1.4 x L1	40mN·m	1
M	Type 2 minuteness M1.4 x L1	40mN·m	1
N	CWø0.7-ø1.8-t0.1	———	2
O	Wø1.2-ø2.5-t0.3	———	2

8-5-3. Main chassis assembly and slide chassis assembly assembling method

(1) Enter the coupling mode. (In this position, the cam groove of the T arm operation lever in the figure is parallel to the side of the main chassis, and the poll base is slightly moved.)

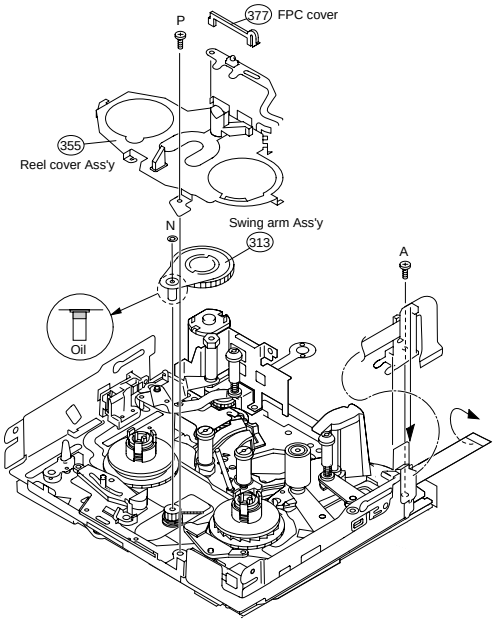
(2) Insert the slide chassis side operation pins (① tension arm, ② Tu guide arm, ③ pinch lever) in the position shown below at the main chassis side, move the slide chassis in the arrow direction, using Ⓐ to Ⓓ as guides, insert the loading lever operation pin into the groove of slide chassis, and install with the 4 screws.

1.



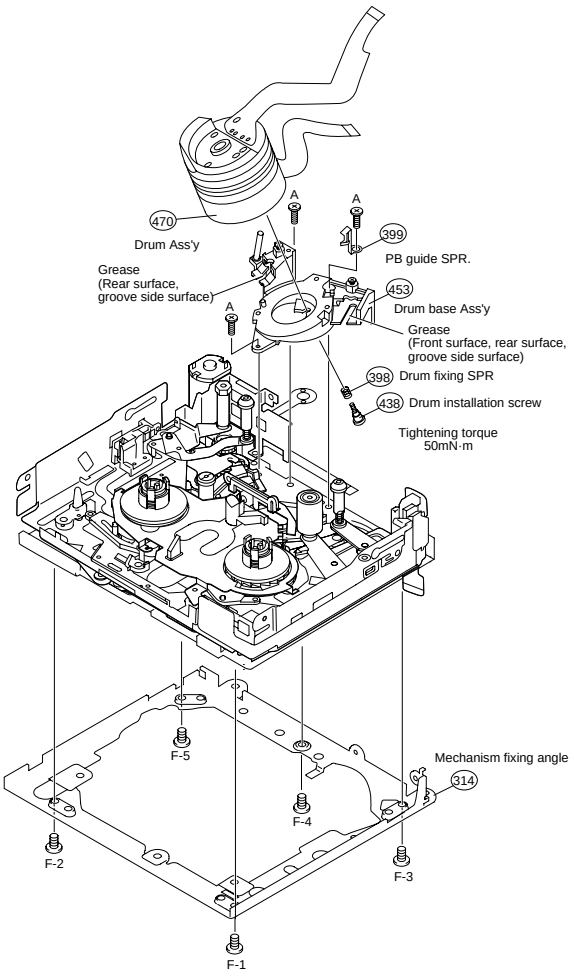
	Item	Tightening torque	Quantity
C	Special screw · M1.4 x L1.6	40mN·m	4

2.



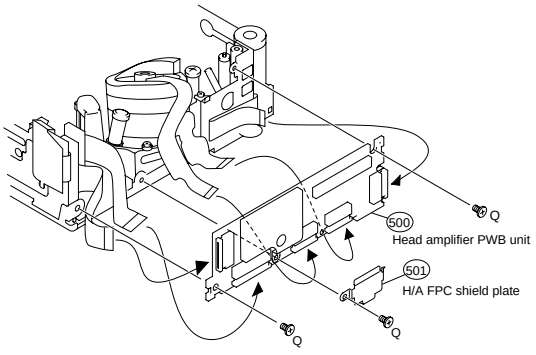
	Item	Tightening torque	Quantity
A	S Tight · M1.4 x L3	40mN·m	1
N	CWø0.7-ø1.8-t0.1	————	1
P	Type 1 minuteness M1.4 x L1	40mN·m	1

3.



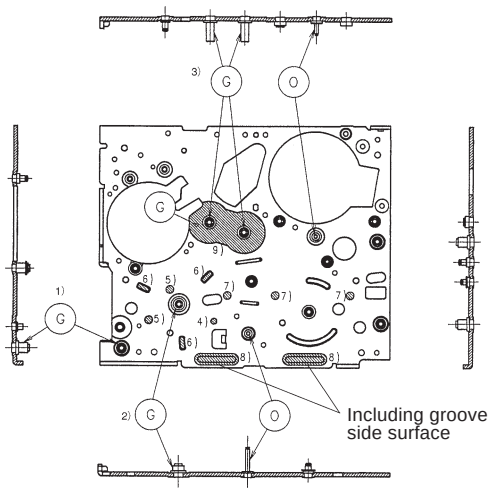
	Item	Tightening torque	Quantity
A	S Tight · M1.4 x L3	70mN·m	3
F	S Tight · M1.4 x L2	70mN·m	5

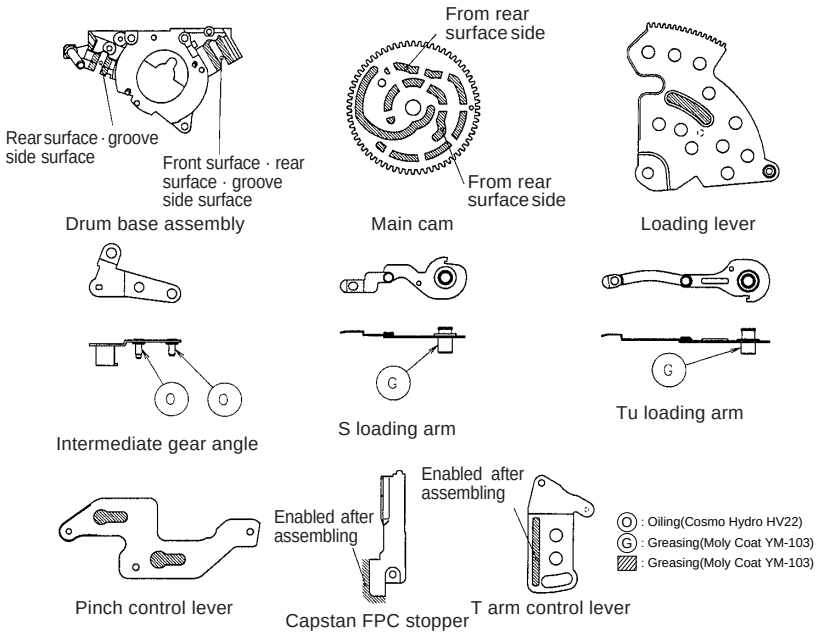
4.



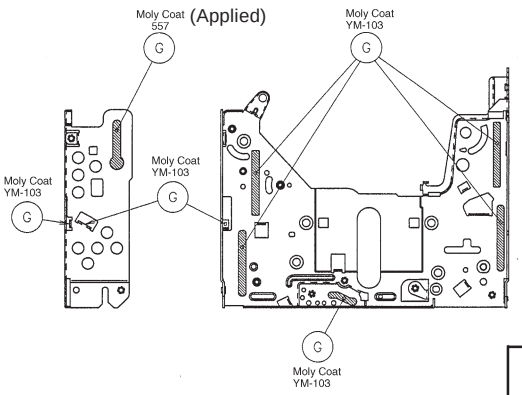
	Item	Tightening torque	Quantity
Q	Special screw · M1.4 x L2	40mN·m	3

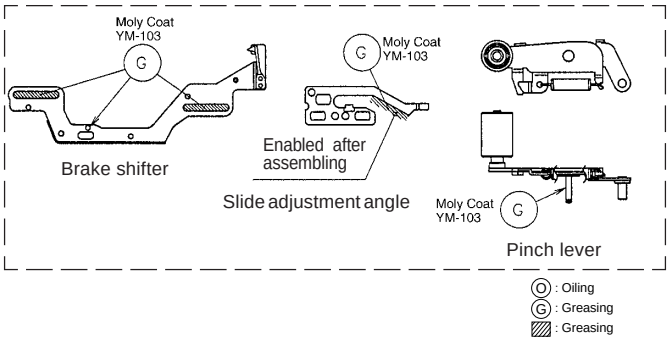
GREASE/OIL APPLICATION

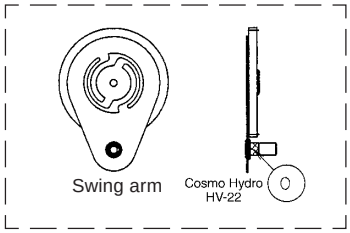




Side of the main chassis

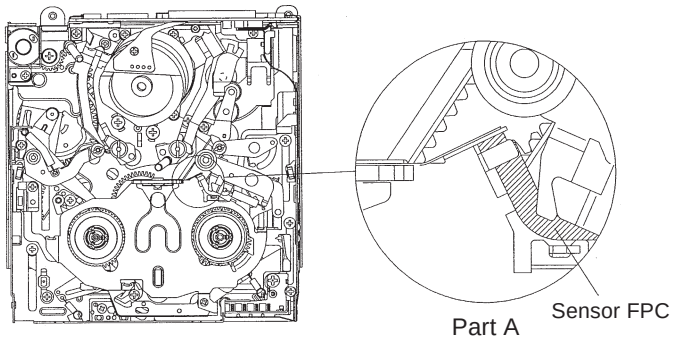






After joining the main chassis and slide chassis

Side of the slide chassis



Sensor FPC wiring

8-6. Removing the cassette

(1) Apply DC3V to the loading motor unload slightly.
(2) After the tape is slackened, turn the rotor (lower side of mechanism) of capstan motor to tighten the tape. (Arrow direction, Fig. 1)
(3) Repeat the operations (1) and (2). After the pole base has been completely unloaded, ascertain that the tape is not loose.
(4) Finally apply again DC3V to the loading motor, so that the cassette controller ejects.
(5) Take out the cassette.

Note) DC3V is applied to the loading motor as shown Fig 1. Then, the mechanism moves in the unloading direction.

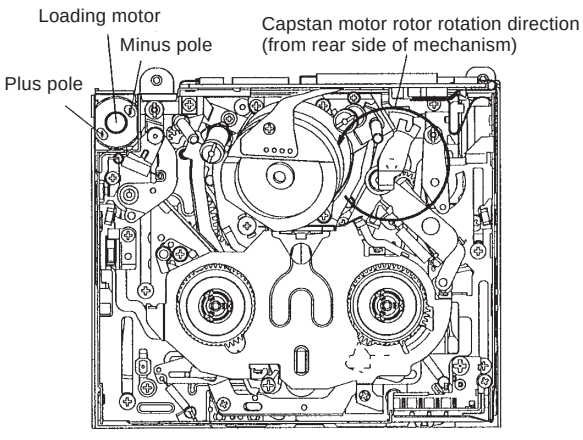


Fig. 1

9. ADJUSTING THE ELECTRICAL CIRCUITS

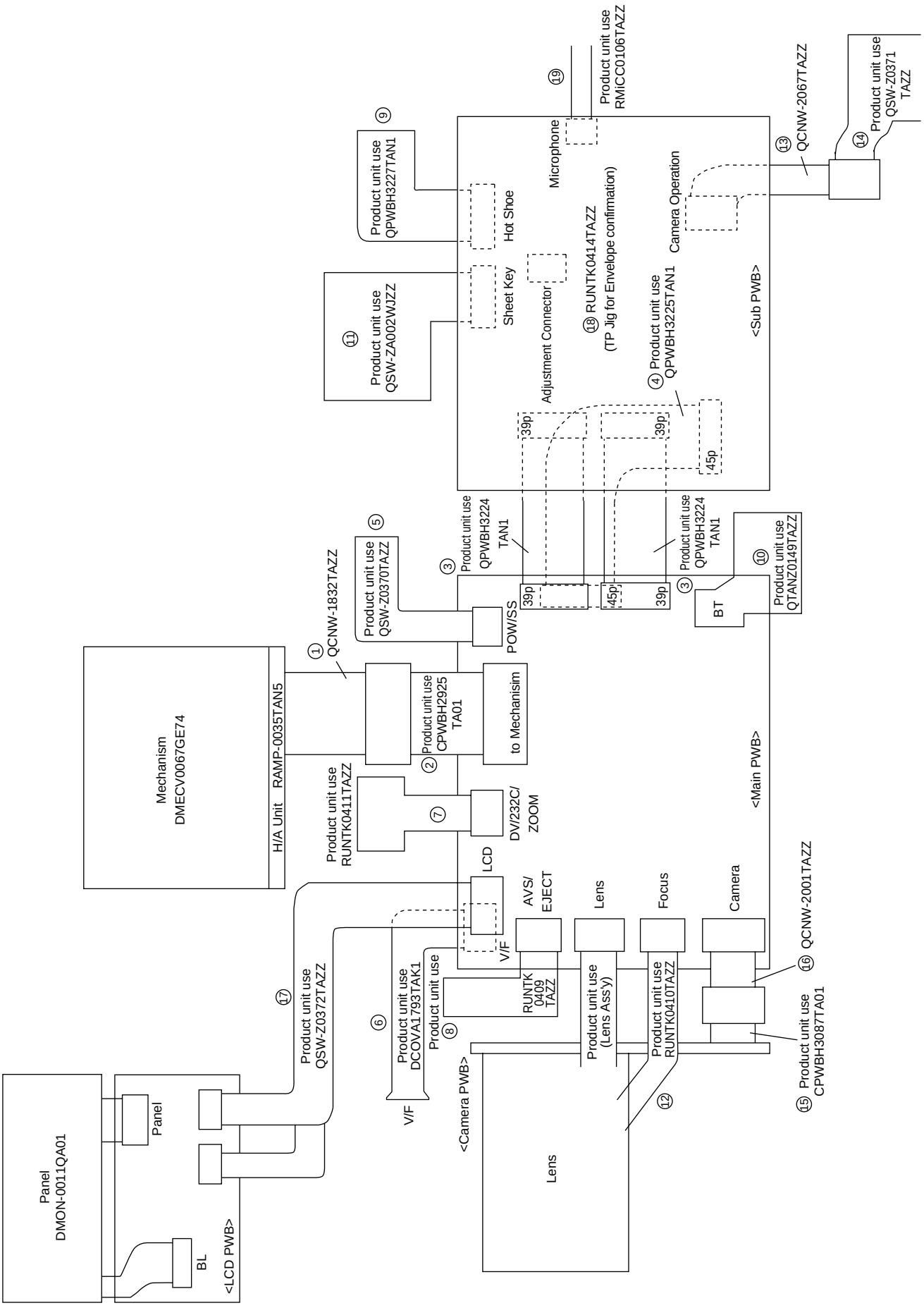
Before starting the electric circuit adjustment

- The adjustment methods described herein are used, in most cases, when the expendable mechanical parts, including the video head, have been replaced, at which time the electrical circuits need to be readjusted. Before adjusting the electrical circuits, make sure that the mechanism works properly (i.e., the mechanism is properly adjusted). Incase of the occurrence of any problem to the electrical circuits, be sure to use the specified measuring instruments to locate the area to which the problem is occurring, and then take the necessary action, including repair, replacement or adjustment, exactly as instructed in the electrical adjustment methods that will follow.
  Do not attempt to make adjustments without using the proper measuring instruments.
- This machine is configured so that the electrical circuits inside its PWB unit are composed, for the most part, of high-density, small surface-mounted component parts for downsized machine body.
  To perform repair service or parts replacement, do so using a soldering iron, but in as short a time as possible; this is because surface-mounted component parts are generally so small in size and susceptible to heat, as compared with the large discrete parts used in TV sets, desk-top video decks, etc., that attempting to heat their electrodes for a longer time than is necessary with a soldering iron may result in their becoming defective.
  This applies particularly when replacing the laminated chip capacitors.
  For this purpose, ceramic soldering irons with a temperature regulator are recommended (iron tip temperature 250°C and soldering time 5 seconds or shorter).

VL-AX1S/H/E/EW/EX Specifications of service jigs

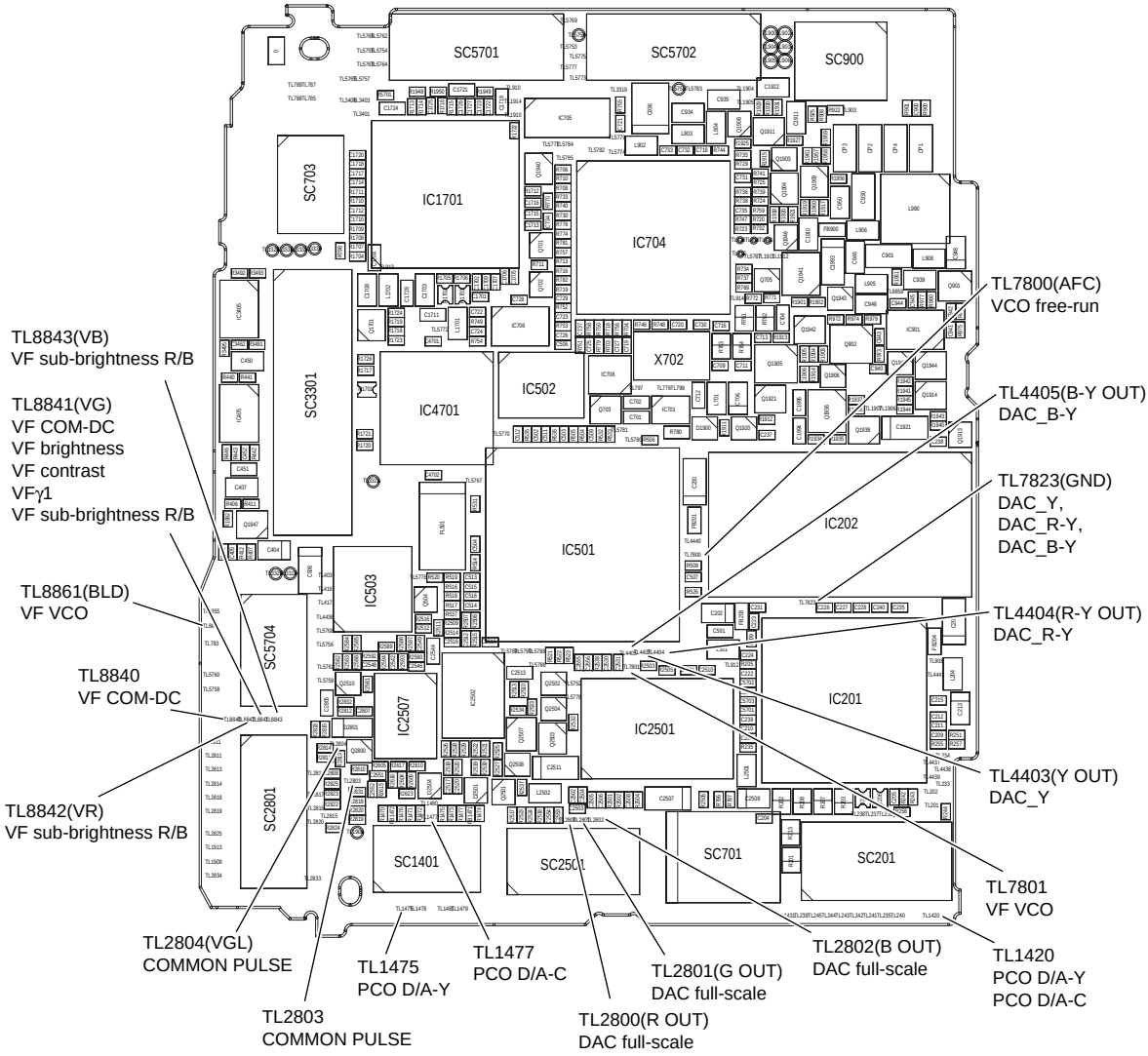
No.	Connection section	Connector REF. No.	No. of pins	New or Continuation	Part cord	Price code
1	H/A PWB–H/A FPC	P306	80B-B	C	QCNW-1832TAZZ	BV
2	H/A FPC–MAIN	SC3301	80B-B		CPWBH2925TA01 Product unit use	AR
3	MAIN PWB–SUB PWB	SC5701, SC5702	39P		QPWBH3224TAN1 Product unit use	AE
4	MAIN PWB–SUB PWB	SC5703	45P		QPWBH3225TAN1 Product unit use	AF
5	Power SW–MAIN PWB	SC703	17P		QSW-Z0370TAZZ Product unit use	AR
6	V/F–MAIN PWB	SC8801	21P		DCOVA1793TAK1 Product unit use	AS
7	DV/232C/ZOOM SW–MAIN PWB	SC5704	21P		RUNTK0411TAZZ Product unit use	AT
8	AVS/EJECT SW–MAIN PWB	SC1401	21P		RUNTK0409TAZZ Product unit use	AT
9	Hot shoe–SUB PWB	SC6602	12P		QPWBH3227TAN1 Product unit use	AG
10	Battery Terminal–MAIN PWB	SC900	20B-B		QTANZ0149TAZZ Product unit use	AQ
11	VCR operation–SUB PWB	SC3707	10P		QSW-ZA002WJZZ Product unit use	AV
12	Focus Ring Unit–MAIN PWB	SC701	10P		RUNTK0410TAZZ Product unit use	AQ
13	Camera Operation FPC–SUB PWB	SC3702	30B-B	N	QCNW-2067TAZZ	BS
14	Camera Operation FPC–Camera Operation Unit		30B-B		QSW-Z0371TAZZ Product unit use	AZ
15	CAMCCD PWB–CAMCCD FPC	SC1002	39P		CPWBH3087TA01 Product unit use	AL
16	CAMCCD FPC–MAIN PWB	SC201	40B-B	C	QCNW-2001TAZZ	BY
17	LCD PWB–MAIN PWB	SC2801	33P		QSW-Z0372TAZZ Product unit use	AT
18	TP Jig for Envelope confirmation	SC3703	14B-B	N	RUNTK0414TAZZ	BA
19	Built-in microphone–SUB PWB	P6601	4P		RMiCC0106TAZZ Product unit use	AQ

VL-AX1S/H/E/EW/EX Service jig configuration

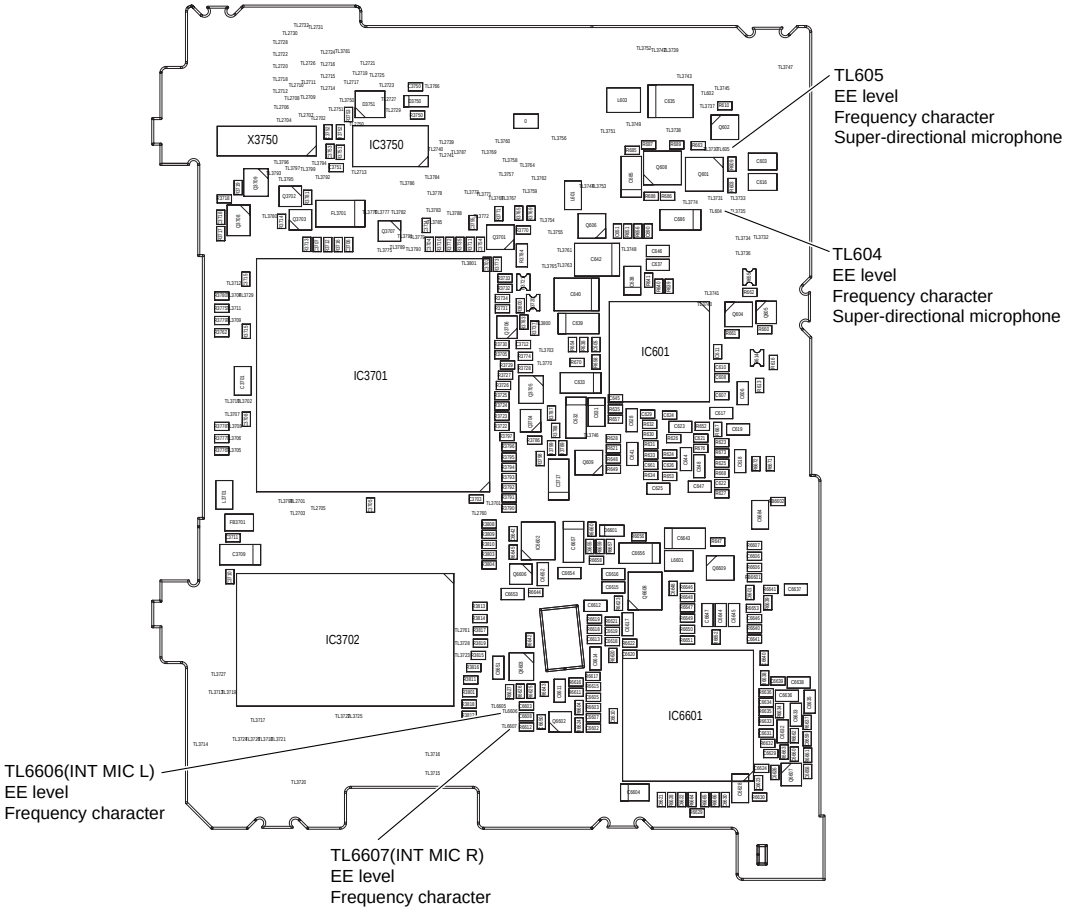


[TEST POINT]

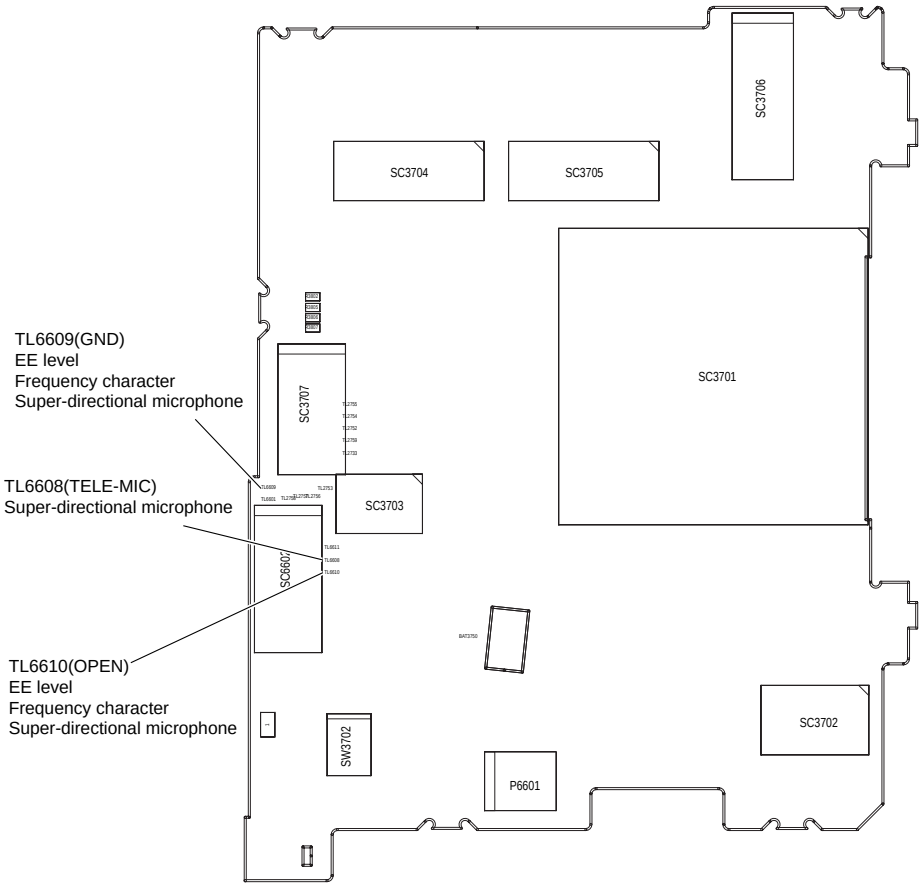
(Wiring board diagram: Main Side B)



(Wiring board diagram: Sub Side A)



(Wiring board diagram: Sub Side B)



[Making adjustments]
Adjusting the servo system controller and related parts
1. Setting the system codes

Replacement of IC705 E^2PROM requires the following data to be set in this order.

[Procedure]

Set the unit to the VCR mode and set the data for each address.

Code	1. Model code		2. Destination code		3. Specifications code		4. Menu selection code		5. Software switching code		6. Calendar switching	
Address	01	09	02	0A	03	0B	04	0C	05	0D	07	0F
Data	00	FF	01	FE	1C	D3	00	FF	00	FF	01	FE

When replacing the IC705 E^2PROM, first make the following settings and then start the adjustments.

(1) Electromagnetic conversion

Address	27	28	2B	*105	25	26
Data	40	90	90	80	40	90

* The address uses only when replacing the IC302.

• Manual adjustment

Mode	VCR ADJ mode
Procedure	1) Set the CAM/OFF/VCR selection switch to VCR. 2) Press “CONTINUE” → ”VCR adjustment” on the remote controller to set the VCR adjustment mode. (At this time an indication “VCR ADJ” appears at the left lower side.) Enter a setting corresponding to the address. <Setting method> 3) Adjust the address by moving up and down the blinking numeral with the FF and REW key, and fix the address by pressing the PB key. 4) Adjust to the setting by moving up and down the blinking numeral with the FF or REW key, and set data by pressing the PB key. 5) Press the STOP key to set the address set state. 6) Repeat the operations 3), 4) and 5) as much as input addresses. After completion of input of all items hold down the “CONTINUE” key to cancel the VCR adjustment mode. 7) Set the CAM/OFF/VCR selection switch to OFF.
Examples	• During E^2PROM (IC705) replacement.

2. HSWP adjustment

Mode	VCR ADJ mode
Procedure	1) Play back the alignment tape in the video mode. 2) Press the "CONTINUE" and "HSWP ADJ" keys on the adjustment remote control in this order. → This executes the HSWP adjustment. When the adjustment is successful, the LCD lights up [OK] and the cassette is automatically ejected. If not properly adjusted, the LCD lights up [NG].
Examples	• During mechanism replacement. • During E^2PROM replacement (IC302 inside the head amplifier circuit board).

3. SHUT OFF adjustment

Mode	VCR ADJ mode
Procedure	1) Load a recordable tape, and set the camera mode. 2) Press the "CONTINUE" and then the "TEST SEL" on the remote control for adjustment to enter the TEST mode (T-01 blinks). 3) Select T-03 with the FF or REW key and then press the PB key. (By the remote control) 4) Observing the power voltage from TL900(-), set it so that TL904(+) obtains 6.00V ± 50mV. 5) Press the playback key on the main unit. Turn off the power and the adjustment is completed.
Examples	• During microcomputer (IC704) or E^2PROM (IC705) replacement.

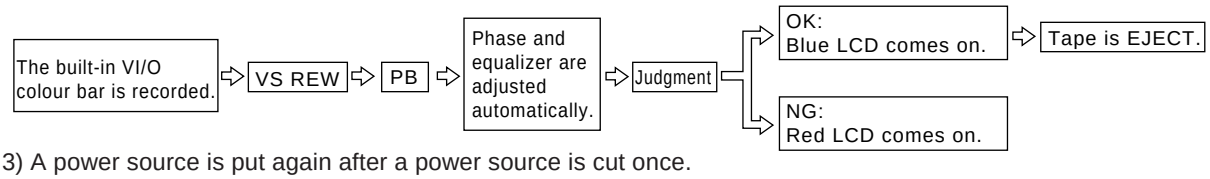
ADJUSTING THE ELECTROMAGNETIC CONVERSION CIRCUIT SYSTEM

1. PLL VCO adjustment

Mode	VCR ADJ mode
Procedure	1) Playback the alignment tape (or a self-recorded tape). 2) Call the adjustment mode (V-ADJ). 3) Set the address "2A" and call the data. 4) Set the called data with the FF/REW key to the point where the playback screen appears. (At this time, the screen full of block noise is OK.)
Examples	• During E^2PROM replacement. • During circuit board (Main) replacement.

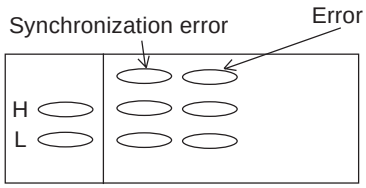
2. Phase and equalizer adjustment → (Performed in the VCR mode)

Mode	VCR ADJ mode
Procedure	1) Load a self-recorded tape into the deck. 2) After playback for 3 minutes, select the test mode 0F using the remote control for adjustment to start the automatic adjustment. (The following sequence is automatically performed.)



3) A power source is put again after a power source is cut once.
4) Error rate check
Select and fix the TEST MODE 0B on the adjustment remote control.
5) Manual adjustment method (video adjustment mode)
* Perform this adjustment with the self-recording/playback in the LP mode.
For phase, vary the data for the address 26 and 2B, and for equalizer, vary the data for the address 25 and 27, to set the error rate is made as small as possible.

	Phase	Equalizer
H ch side	2B	27
L ch side	26	25

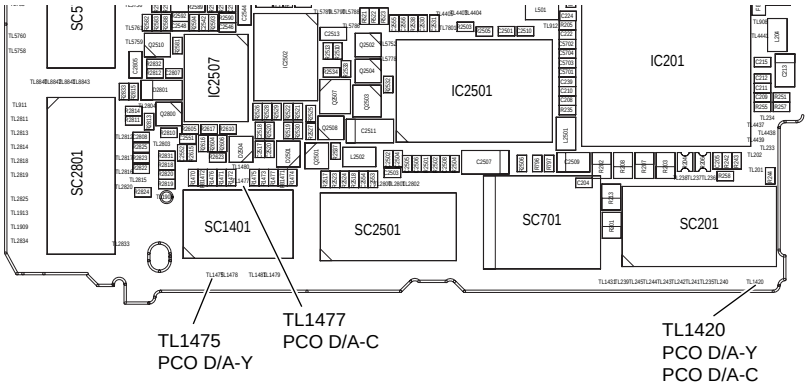


Synchronization error	20 or less
Error rate	200 or less (SP Mode)
	330 or less (LP Mode)

Examples	• During mechanism replacement. • During circuit board (Main) replacement. • During E^2PROM replacement.

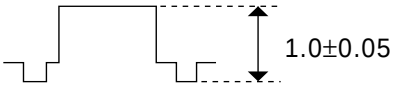
ADJUSTING THE VIDEO I/O CIRCUIT SYSTEM

(Wiring board diagram: Main Side B)



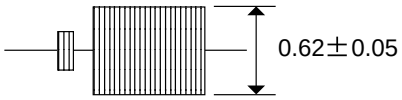
1. PCO D/A-Y adjustment

Test point	TL1475 (connected to oscilloscope)	Address	VCR ADJ 22
Mode	EE mode		
Procedure	1) Connect TL1420 to GND. 2) Connect the AVS cable and then connect it to the monitor (TO). 3) Call the adjustment mode (V-ADJ). 4) Set the address to "22", and call the date. (100% white signal is output.) 5) Vary the date with the FF and REW keys to set the signal appearing at TL1475 to 1.0Vp-p ± 0.05Vp-p.		
Examples	• During E^2PROM replacement. • During IC4401 replacement. • During IC1401 replacement.		



2. PCO D/A-C adjustment

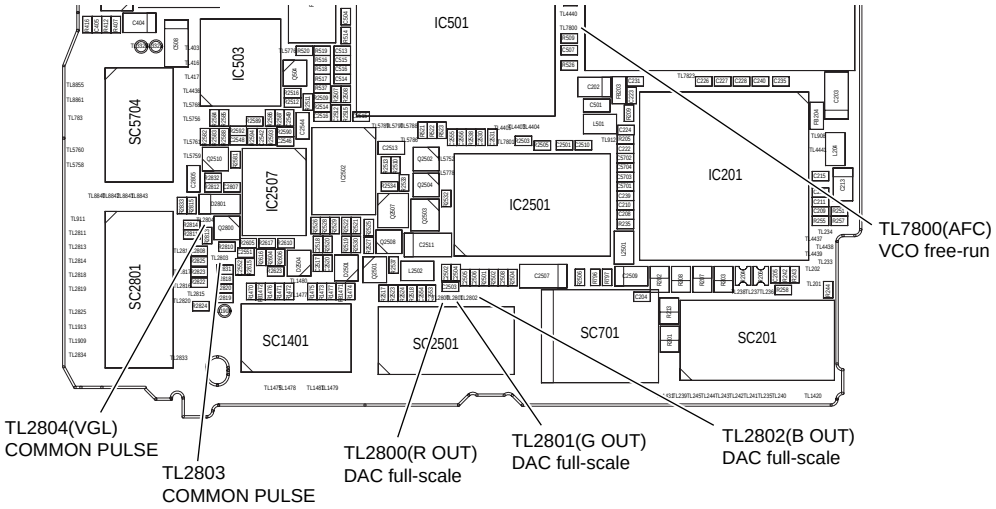
Test point	TL1477	Address	VCR ADJ 23
Mode	EE mode		
Procedure	1) Connect TL1420 to GND. 2) Connect the AVS cable and then connect it to the monitor (TO). 3) Call the adjustment mode (V-ADJ). 4) Set the address to "23", and call the data. 5) Vary the data with the FF and REW keys to set the signal appearing at TL1477 to 0.62Vp-p ± 0.05Vp-p.		
Examples	• During E^2PROM replacement. • During IC4401 replacement. • During IC1401 replacement.		



ADJUSTING THE LCD CIRCUIT

* To make this adjustment, set the backlight switch to the "NORMAL" position.

(Wiring board diagram: Main Side B)



Adjustment procedure and connecting same as the VCR section.

1. VCO free-run adjustment

Test point	TL7800(AFC)	Address	VCR ADJ 32
Mode	VCR AV input		
Procedure	1) Input the white 100% signal to AV input. 2) Connect the digital voltmeter to TL7800, and adjust DC voltage value to the specified adjustment value with VCR ADJ 32.		
Adjustment rating	2.00 ± 0.1V		
Examples	• During E²PROM (IC705) replacement. • During VIO ENG (IC4401) replacement. • During DAC (IC4701) replacement.		

2. DAC full-scale adjustment

Test point	TL2800(R OUT), TL2801(G OUT), TL2802(B OUT)
Address	VCR ADJ 3D(R), VCR ADJ 3E(G), VCR ADJ 3F(B)
Mode	VCR AV input
Procedure	1) Set the VCR ADJ 83/93/C0 to 00/77/00. (At this time, LCD can not be displayed.) 2) With the VCR ADJ 3D, adjust the output voltage of TL2800 and the DC voltage value of the digital voltmeter to the specified adjustment values. 3) Similarly with the VCR ADJ 3E/3F, adjust the output voltage of TL2801/2802 and the DC voltage value of the digital voltmeter to the specified adjustment values. (Same as Item (2)) 4) Return the VCR ADJ 83/93/C0 to the initial value. (Initial value: C5/7F/28)
Adjustment rating	0.78V ± 10mV
Examples	• During E²PROM (IC705) replacement. • During VIO ENG (IC4401) replacement. • During DAC (IC4701) replacement.

3. COMMON PULSE adjustment

Test point	TL2804(VGL)	Address	VCR ADJ 29(C)
Mode	VCR AV input		
Procedure	1) Connect TL2803 to GND. 2) Set the VCR ADJ 93 to A0. 3) With VCR ADJ 29, adjust the output voltage of TL2804 and the DC voltage value of the digital voltmeter to the specified adjustment values. 4) Return the VCR ADJ 93 to the initial value. (Initial value: 7F)		
Adjustment rating	6.95V ± 50mV		
Examples	• During E²PROM (IC705) replacement. • During DAC (IC4701) replacement.		

4. COM-Bias adjustment

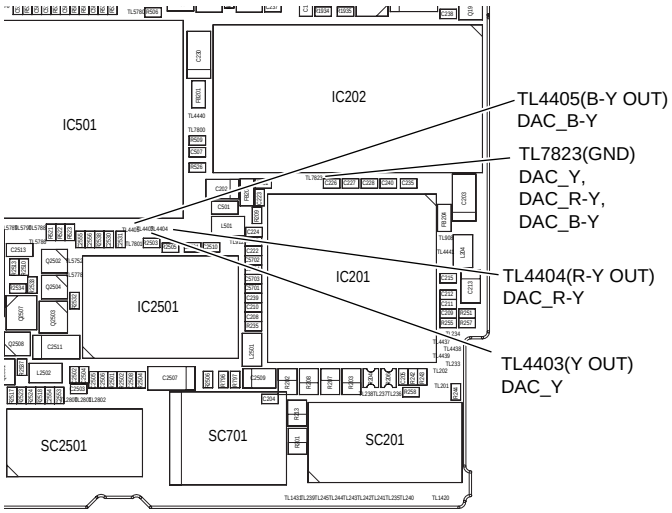
Test point	LCD panel display area	Address	VCR ADJ 33
Mode	VCR AV input		
Procedure	1) Input white 40% signal into the AV input. 2) Set the illuminometer (TOPCON IM-3) on the LCD panel surface. (Shut off the external light.) 3) Minimize the ripple of output waveform of illuminometer.		
Adjustment rating	Minimum Response time : 0.6 sec.		
Remark	Make this adjustment after 5-minute or longer aging.		
Examples	• During LCD panel replacement. • During IC705, IC4401, IC4701 replacement.		

5. White Balance adjustment

Test point	LCD panel daisplay area	Address	VCR ADJ 84(R), VCR ADJ 86(B)
Mode	VCR AV input		
Procedure	1) Input white 40% signal into the AV input. 2) Input white 40% signal into the standard monitor, and adjust it until it becomes the same as that screen.		
Adjustment rating	Standard monitor		
Remark	Make this adjustment after 5-minute or longer aging.		
Examples	• During LCD panel replacement. • During IC705, IC4401, IC4701 replacement.		

VIDEO I/O ENG DAC CIRCUIT

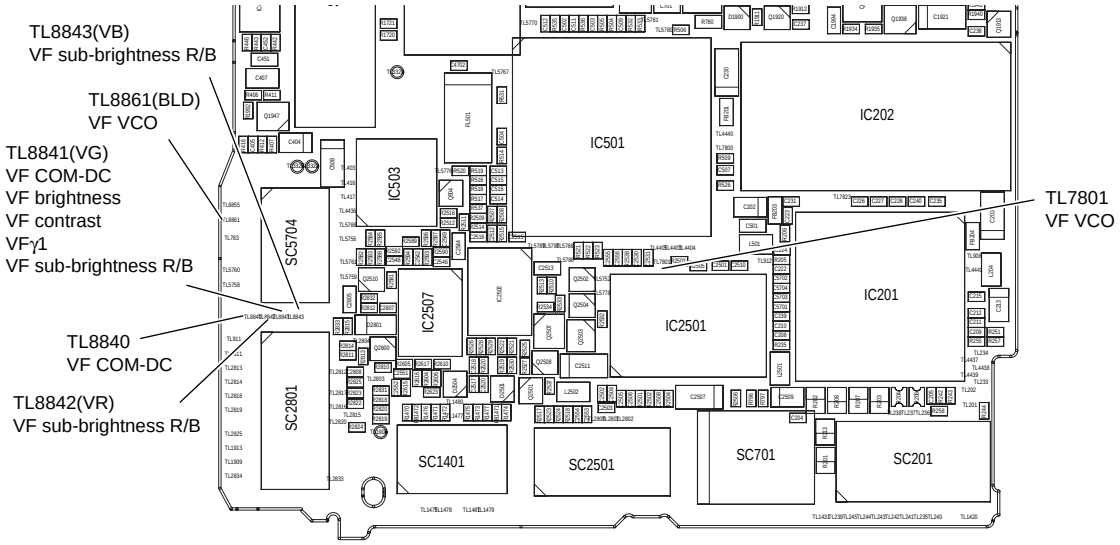
(Wiring board diagram: Main Side B)



6. DAC_Y adjustment, DAC_R-Y adjustment, DAC_B-Y adjustment

Test point	TL4403(Y OUT), TL4404(R-Y OUT), TL4405(B-Y OUT), TL7823(GND)
Mode	CAM
Address	VCR ADJ FA(Y), VCR ADJ FB(R-Y), VCR ADJ FC(B-Y)
Procedure	1) Set VCR ADJ 303/304/432/423/424/425/426 to 0C/EF/63/90/EB/80/80. 2) With VCR ADJ FA, adjust the output voltage of TL4403 and the DC voltage value of the digital voltmeter to the specified adjustment values. 3) Similarly with VCR ADJ FB/FC, adjust the output voltage of TL4404/TL4405 and the DC voltage value of the digital voltmeter to the specified adjustment values. (Same as Item (2)) 4) Return VCR ADJ 303/304/432/423/424/425/426 to the initial value. (Initial value: FF/FF/43/10/29/6E/F0) Note:When it is changed to the initial value FF/FF/43/10/29/6E/F0, OSD display goes out together with LCD/VF. Checking the monitor output, adjust it. After adjustment, be sure to return to FF.
Adjustment rating	0.450V ± 5mV (Y OUT), 0.229V ± 2mV (R-Y OUT), 0.290V ± 2mV (B-Y OUT)
Examples	• During IC705, IC4401, IC4701 replacement.

(Wiring board diagram: Main Side B)



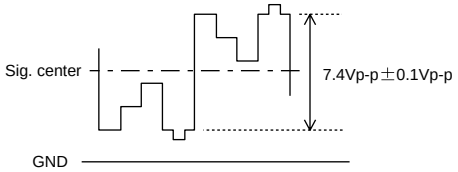
7. VF VCO adjustment

Test point	TL8861(BLD)	Address	VCR ADJ E1
Mode	VCR AV input		
Procedure	1) Connect TL7801 to GND. (No signal) 2) Connect TL8861 to the frequency counter, and adjust the frequency to the specified adjustment value with the VCR ADJ E1.		
Adjustment rating	15.625 ± 0.1KHz		
Examples	• During IC705 or IC8800 replacement.		

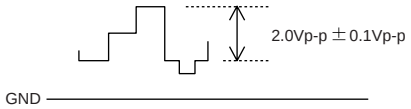
8. VF COM-DC adjustment

Test point	TL8840	Address	VCR ADJ F6
Mode	VCR AV input		
Procedure	1) Input the signal of a 3-step waveform. 2) Read the DC voltage value of the output of TL8841 with the digital voltmeter. (VG_{DC}) 3) Similarly rad the DC voltage value of the output of TL8840 with the digital voltmeter. ($VCOM_{DC}$) 4) Adjust the value of ($VCOM_{DC}$ - VG_{DC}) to the specified adjustment value.		
Adjustment rating	-0.15 ± 0.1V		
Examples	• During IC705 or IC8800 replacement.		

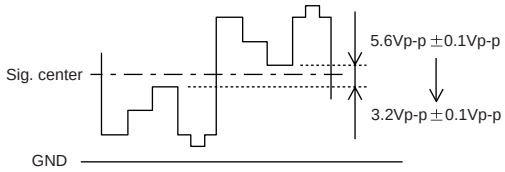
9. VF brightness adjustment

Test point	TL8841(VG)	Address	VCR ADJ E0
Mode	VCR AV input		
Procedure	1) Input the signal of a 3-step waveform. 2) Set VCR ADJ ED to 00. 3) Adjust the waveform pedestal range of TL8841 to the specified adjustment value. 4) Return VCR ADJ ED to the initial value. (Initial value: 7A)		
Adjustment rating	7.4Vp-p ± 0.1Vp-p 		
Examples	• During IC705 or IC8800 replacement.		

10. VF contrast adjustment

Test point	TL8841(VG)	Address	VCR ADJ E5
Mode	VCR AV input		
Procedure	1) Input the signal of a 3-step waveform. 2) Set VCR ADJ EB/ED to FF/00. 3) Adjust the pedestal 100% range of the waveform of TL8841 to the specified adjustment value. 4) Return VCR ADJ ED to the initial value. (Initial value: 7A)		
Adjustment rating	2.0Vp-p ± 0.1Vp-p 		
Examples	• During IC705 or IC8800 replacement.		

11. VFγ1 adjustment

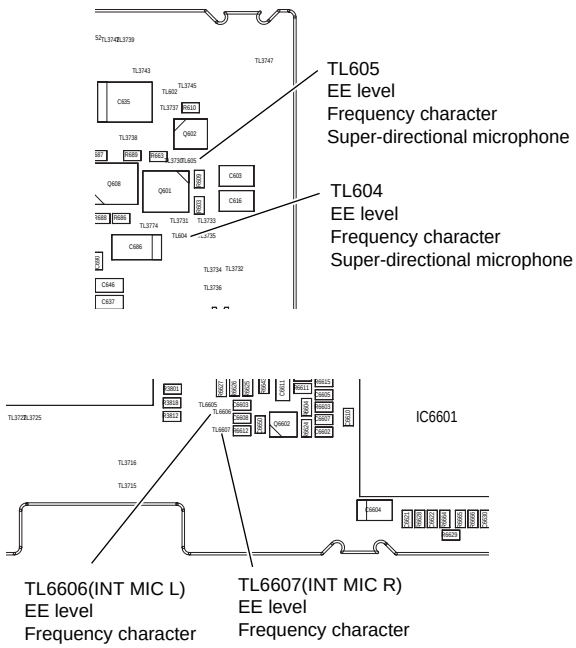
Test point	TL8841(VG)	Address	VCR ADJ EB
Mode	VCR AV input		
Procedure	1) Input the signal of a 3-step waveform. 2) Set VCR ADJ ED to 00. 3) Adjust the white 100% range of the waveform of TL8841 to 5.6±0.1Vp-p with VCR ADJ EB. 4) Then adjust the same waveform VCR ADJ E5 to 3.2±0.1Vp-p. 5) Return VCR ADJ ED to the initial value. (Initial value: 7A)		
Adjustment rating	5.6 ± 0.1Vp-p (VCR ADJ EB) 3.2 ± 0.1Vp-p (VCR ADJ E5) 		
Examples	• During IC705 or IC8800 replacement.		

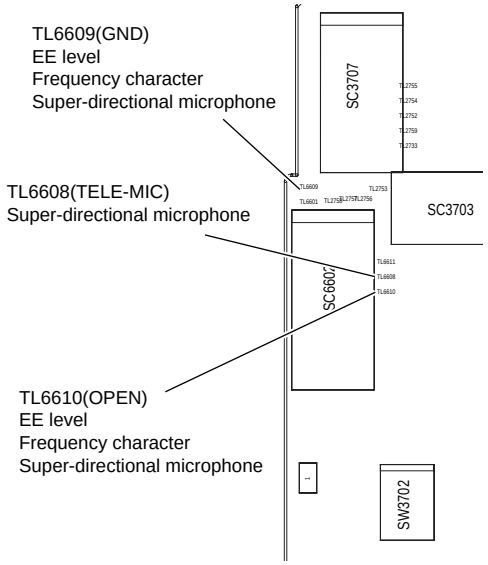
12. VF sub-brightness R/B adjustment

Test point	TL8842(VR), TL8841(VG), TL8843(VB)	Address	VCR ADJ E9(R), VCR ADJ EA(B)
Mode	VCR AV input		
Procedure	1) Input white 40% signal into the AV input and standard monitor. 2) Adjust it with the VCR ADJ E9/EA so as to obtain the same color as the standard monitor.		
Adjustment rating	Standard monitor		
Examples	• During IC705 or IC8800 replacement.		

ADJUSTING THE MIC AMP CIRCUIT

(Wiring board diagram: Sub Side A)





(Wiring board diagram: Sub Side B)

1. EE level check

Measuring instrument	Valve voltmeter	Test point	TL605, TL604
Mode	P-ON (CAM), Zoom MIC "OFF", Timbre mode "NORMAL" , Wind sound decrease "OFF"	Adjustment rating	-9dBs ± 3dB
Test signal	1kHz -54dBs sine wave		
Procedure	1) Input 1kHz, -54dBs sine wave into TL6606(INT MIC L) and TL6607(INT MIC R). 2) Make sure that the signal level of TL605 Audio-L out and TL604 Audio-R out is within the standard limits.		
Remark	TL6610: OPEN, TL6609: GND		

2. Frequency character check

Measuring instrument	Valve voltmeter	Test point	TL605, TL604
Mode	P-ON (CAM) Parameter: Zoom MIC "OFF", Timbre mode "NORMAL", Wind sound decrease "OFF"	Adjustment rating	(1kHz standard) 100Hz: -11dBs ± 3dB 10kHz: 0B ± 3dB
Test signal	100Hz, 10kHz -54dBs sine wave		
Procedure	1) Input 100Hz, -54dBs sine wave and then 10kHz, -54dBs sine wave into TL6606(INT MIC L) and TL6607(INT MIC R). 2) At this time make sure that the signal level of TL605 Audio-L out and TL604 Audio-R out is within the standard limits (1kHz standard).		
Remark	TL6610: OPEN, TL6609: GND		

3. Super-directional microphone check

Measuring instrument	Valve voltmeter	Test point	TL605, TL604
Mode	P-ON (CAM), Zoom MIC "TELE", Timbre mode "NORMAL", Wind sound decrease "OFF"	Adjustment rating	-10dBs ± 3dB
Test signal	1kHz -54dBs sine wave		
Procedure	1) Input 1kHz, -54dBs sine wave into TL6608(TELE-MIC). 2) Make sure that the signal level of TL605 Audio-L out and TL604 Audio-R out is within the standard limits.		
Remark	TL6610: OPEN, TL6609: GND		

DV INTERFACE (IEEE1394) ID SETTING

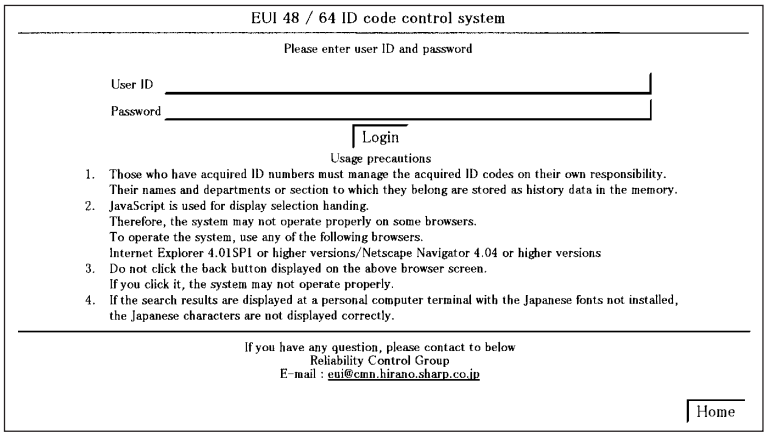
This unit has a DV interface function conforming to IEEE1394. Therefore, each individual ID number must be used for each unit. Since this ID is written on the E²PROM (IC302) on the head amp PWB, the ID must be newly written when replacing this IC or the head amp PWB.

Address	180, 17F, 17E	Mode	VCR
Adjustmentrating	ID number obtained from the URL below		
Procedure	1) Refer to the ID code application below. 2) Set the data obtained in step (1) to the corresponding addresses in the VCR adjustment mode. * (Example) The data "08001F 0100 123456" is obtained. (1) Enter the unit in the VCR ADJ mode. (2) Set the ID numbers as follows.		
Examples	• During E²PROM (IC302: on the H/A unit) replacement. • During the H/A unit (RAMP-0035TAN5) replacement.		

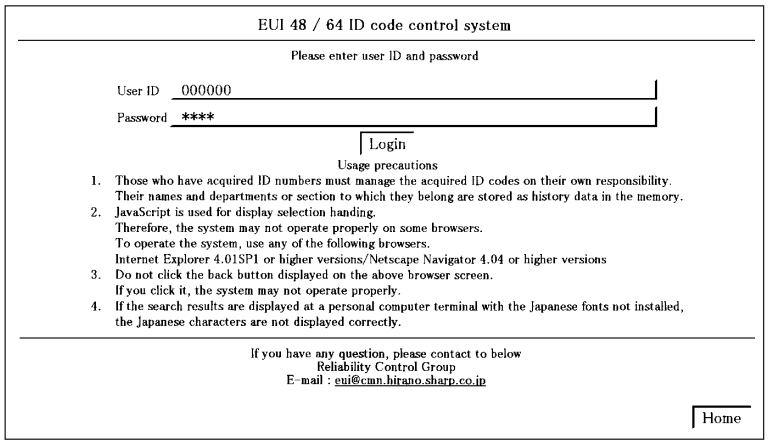
Address	180	17F	17E
Data	12	34	56

■ ID code is acquired

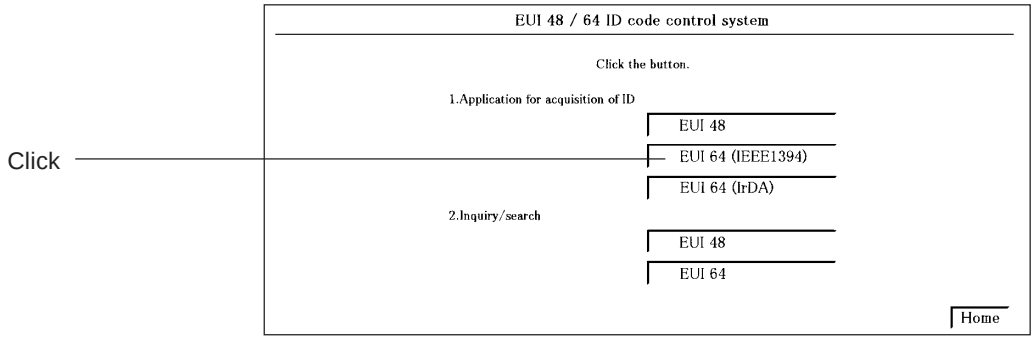
1. Connect with the EUI48/64 ID code control system.
   (1) Start the Internet Explorer or Netscape Navigator.
   (2) Access the following address.
   (URL:http://www.rcg.kami.sharp.co.jp/quics/e_index.html)
   Select the "EUI48/64 ID code control system" from the "Service" item.
   Note: If you want to establish a connection by directly inputting the URL, please input the following.
   URL:http://www1.rcg.kami.sharp.co.jp:7000/adrs_agt/adrs_dba/ide00010.main
   The login screen will appear.


EUI 48 / 64 ID code control system
Please enter user ID and password
User ID
Password
Login
Usage precautions
1. Those who have acquired ID numbers must manage the acquired ID codes on their own responsibility. Their names and departments or section to which they belong are stored as history data in the memory.
2. JavaScript is used for display selection handing. Therefore, the system may not operate properly on some browsers. To operate the system, use any of the following browsers. Internet Explorer 4.01SP1 or higher versions/Netscape Navigator 4.04 or higher versions
3. Do not click the back button displayed on the above browser screen. If you click it, the system may not operate properly.
4. If the search results are displayed at a personal computer terminal with the Japanese fonts not installed, the Japanese characters are not displayed correctly.
If you have any question, please contact to below
Reliability Control Group
E-mail : eui@cmn.hirano.sharp.co.jp
Home

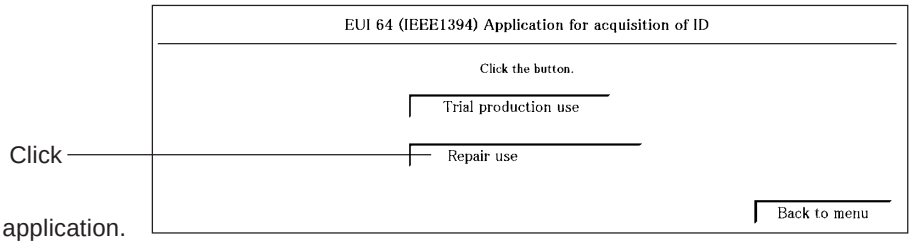
   (3) For the [User ID], input the [Password].
   Click on [Login].


EUI 48 / 64 ID code control system
Please enter user ID and password
User ID 000000
Password ****
Login
Usage precautions
1. Those who have acquired ID numbers must manage the acquired ID codes on their own responsibility. Their names and departments or section to which they belong are stored as history data in the memory.
2. JavaScript is used for display selection handing. Therefore, the system may not operate properly on some browsers. To operate the system, use any of the following browsers. Internet Explorer 4.01SP1 or higher versions/Netscape Navigator 4.04 or higher versions
3. Do not click the back button displayed on the above browser screen. If you click it, the system may not operate properly.
4. If the search results are displayed at a personal computer terminal with the Japanese fonts not installed, the Japanese characters are not displayed correctly.
If you have any question, please contact to below
Reliability Control Group
E-mail : eui@cmn.hirano.sharp.co.jp
Home

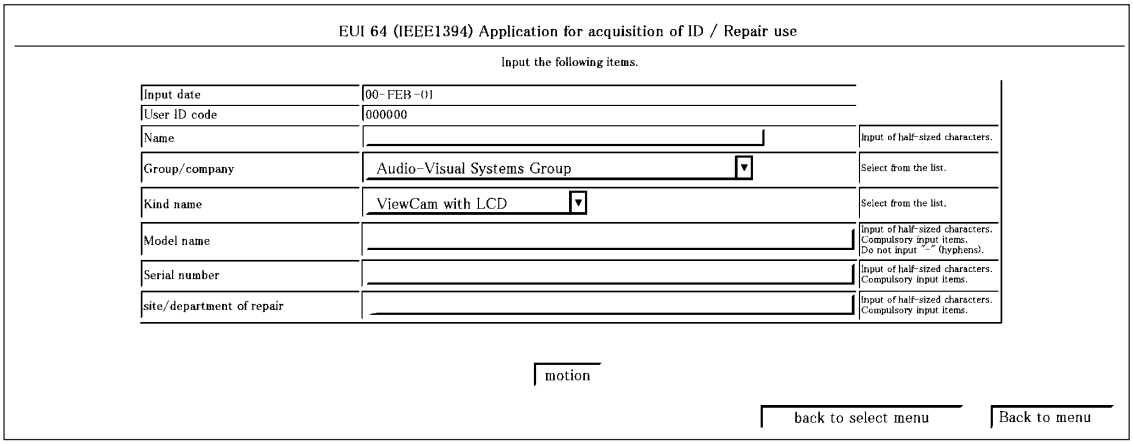
   (4) Click on [EUI 64 (IEEE 1394)] from the [1. Application for acquisition of ID].



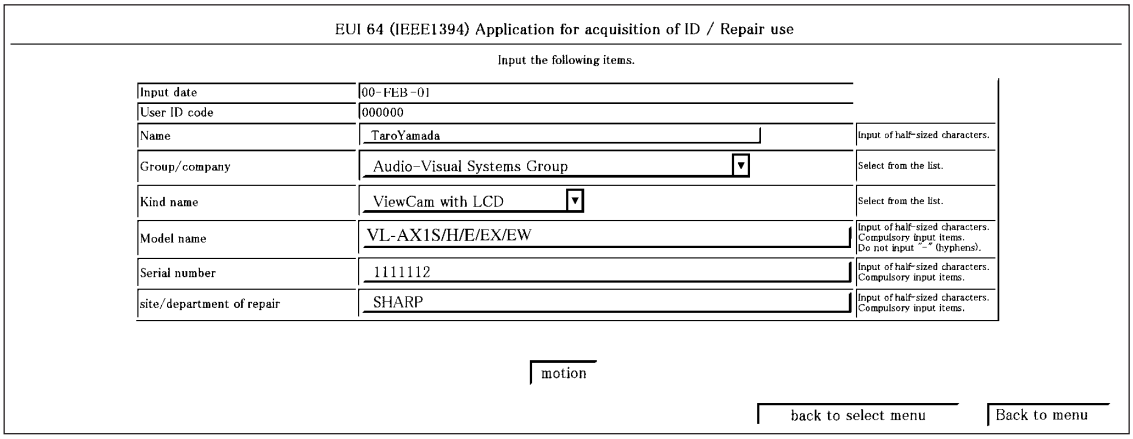
(5) Click on [Repair use].



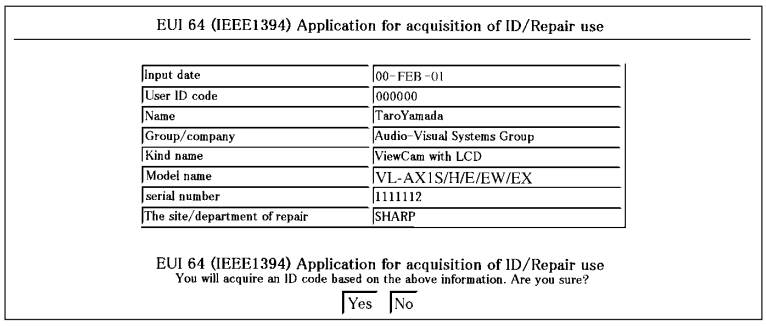
(6) Input the necessary information for the application.
For the indispensable input items, be sure to input them.
Select the [Group/company] and [Kind name] from the list.
Input the [Model name].
Input the [Serial number].
Input the [Site/department of repair].



(7) Click on [motion].
The confirmation screen will appear.



(8) Click on [Yes].



2. Print the application result.
(1) Print out the application result screen.
Control the application result as evidence.
To print it, select "Print (P)" from the "File (F)" in the menu bar or click on the print button in the tool bar.
(2) Click on [Menu] to complete the application.
If you create applications in succession, repeat steps (1)~(8).
To complete it, click on [End] in the menu screen.

MODEL ID SETTING

Address	VCR ADJ FD, FE, FF	Mode	VCR
Adjustment rating	The following table reference. VL-AX1 (102022)		
Procedure	1) Set the unit to the VCR ADJ mode. 2)		

Address	FD	FE	FF	Model
Data	10	20	23	S
			24	H
			25	E

Examples	• During E^2PROM (IC705) replacement.

9-2. Camera Section Adjustments

9-2-1. Camera section service

(1) Camera adjustment is performed after the set has been completed.

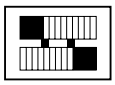
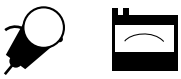
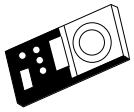
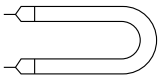
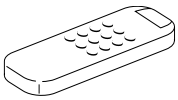
(2) Subjects, measuring instruments and jigs needed for camera section service and adjustments

• Gray scale chart • Color bar chart • Oscilloscope • Digital voltmeter • Halogen lamp: 2 pcs. • Vector scope	• Frequency counter • Illumination meter • Color temperature meter • Color temperature conversion filter HOYA "LB-165" • Color video monitor	• Video output cable • AC adapter • Extension cables • Remote control unit for servicing

9-2-2. List of camera jigs and tools

Configuration

<Note: The entries of list> 1. Name 2. Part No. 3. Code

 1. Gray scale chart (390 x 520 mm) 2. JiGCHART-1 3. CP	 1. Color bar chart (240 x 320 mm) 2. JiGCHART-4 3. DA	 1. Illumination meter (0 to 3000 lux) 2. JiGMETER-1 3. CT	 1. Color temperature meter (1600 to 40000 degrees K) 2. JiGMETER-2 3. EL
1. Color temperature conversion filter (3200 degrees K ⇒ 6800 degrees K) 2. JiGHOYA-LB165 3. BN	 1. PC plate connector drawer 2. JiGTH-SS10 3. AW	 1. Remote control until for servicing 2. RRMCG0033TASA 3. BT	

9-2-3. Adjusting the camera unit

(1) Preparations for adjustments and items to be checked

1) Set up the light box so that the entire pattern is evenly lit. Set the color temperature to 3200°K.
2) Use test patterns that are not dirty nor discoloured.
3) If the electrical circuitry gets in trouble, be sure to pinpoint the trouble spot with a measuring instrument and repair or replace the defective part.

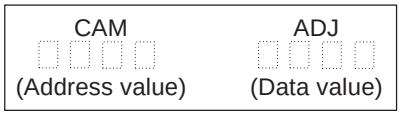
(2) Remote control for servicing RRMCG0033TASA

To adjust the camera section of this machine, the remote control for servicing (RRMCG0033TASA) is used. The adjustment is made in such a manner that the remote control writes necessary data by way of the microprocessor to the specific addresses on the E^2PROM (IC502).

1) To adjust the camera:
Press the "CONTINUE" key first and then the "CAM ADJ" key.
This will show

on the LCD screen, thereby having the camera unit ready for the adjustments.

2) Descriptions of the displays



(Indicates the camera adjustment mode.)

* The address values for this machine range from 0000 to 09FF.
* The data include byte data (the last two digits are effective) and 2-byte data (the last three digits are effective).

3) Descriptions of the remote control keys

"FF" key: Increases the address and data values.
"REW" key: Decreases the address and data values.
"PLAY" key: Specifies addresses and calls the data.
This key also fixes the data values.
"STOP" key: Clears the data to enable the selection of address.

4) Operation flow

→ FF or REW → PLAY → FF or REW → PLAY → STOP →

Address is selected and specified, with the data called. Then the called data are selected and fixed. The operation flows in this sequence.

5) When the adjustment is complete:
Press the "CONTINUE" key to let the "CAM ADJ" display disappear from the screen.
Note: Before terminating the adjustments, make sure that the adjustment mode is neither the auto-focus function adjustment mode nor the camera signal system adjustment mode (these modes are mentioned later).

- Camera unit adjustment modes
The camera unit is adjusted in two types of modes: the auto-focus function adjustment mode and the camera signal system adjustment mode.

Note: E^2PROM contains the adjustment item data as shown below. If it is changed, data rewriting and confirmation of latest data must be performed.
1) E^2PROM on Camera Head Section
Lens Data
2) E^2PROM(IC502) on main unit
Signal system adjustment data

(3) Auto-focus function adjustment mode

- The camera unit uses a microprocessor-controlled auto-focus zoom lens.
The auto-focus circuit incorporated in this unit is designed to execute the image processing where the focusing action is done by taking advantage of the fact that the high-frequency components in the image signals increase as the focus intensifies. Moreover, to achieve high magnifying power with a small lens, the camera unit incorporates the inner focus system in which the focus is shifted by moving the master lens (rear lens) back and forth. This inner focus system is a full-range focus type by which the focus can be shifted from approximately 10 mm to the infinity. It should be noted, however, that since the closest subject distance at the telephoto end is fixed at 1.5 m, subjects in a closer range than 1.5 m at the telephoto end will be out of focus. For this reason, the unit is designed so the zoom control is automatically shifted to the wide angle side until the position is found where the subject can be focused on.

In the auto-focusing system of this until, the following constitute the important factors:
- Master lens position detection data
- Iris position detection data
- Zoom lens position detection data

These detection data are handled and stored by the microprocessor, lens by lens, into the E^2PROM.
Therefore, in the following cases, the auto-focus function adjustment is required:
- When the lens has been replaced
- When the CCD has been replaced
- When the E^2PROM has been replaced

1) Shifting to the auto-focus function adjustment mode
Set the data for the address "0000" to "□□ 01".
⇩
This makes the screen fade temporarily in white and shifts to the auto-focus function adjustment mode.

* When this adjustment mode has been shifted to, make the adjustment according to (5) Camera unit adjustment procedure.
* In this adjustment mode, the lens can not be operated.

2) Shifting to the normal operation mode
Set the data for the address "0000" to "□□ FF".
⇩
This makes the screen fade temporarily in white and shifts to the normal operation mode.
⇩
Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

(4) Camera signal system adjustment mode

In the camera signal system adjustment mode, the automatic white balance is disabled to allow for the adjustment of the camera unit. At this time, the white balance mode is fixed at the INDOORS mode and the focus mode is switched to the manual focus mode.

1) Shifting to the camera signal system adjustment mode

Set the data for the address "0000" to "□□00".

⇩

This shifts the camera signal system adjustment mode.

* When this adjustment mode has been shifted to, make the adjustment according to (5) Camera unit adjustment procedure.

2) Shifting to the normal operation mode

Set the data for the address "0000" to "□□FF".

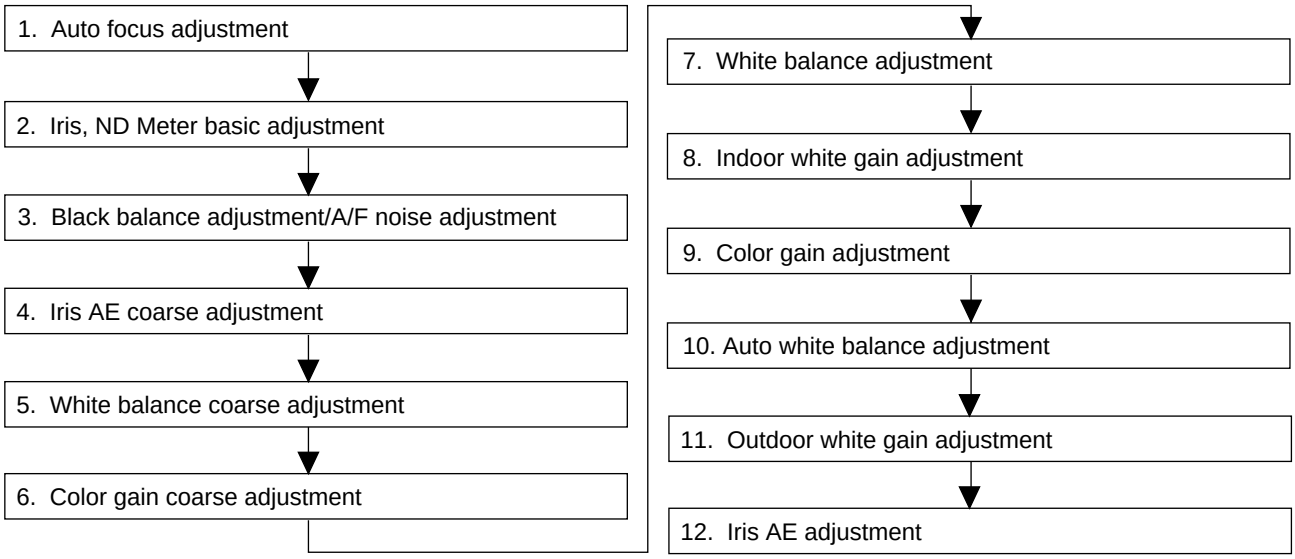
⇩

This shifts the mode to the normal operation mode.

⇩

Press the "CONTINUE" key, and the "CAM ADJ" display goes out of the screen, enabling the normal operation.

(5) Camera unit adjustment procedure


1. Auto focus adjustment
2. Iris, ND Meter basic adjustment
3. Black balance adjustment/A/F noise adjustment
4. Iris AE coarse adjustment
5. White balance coarse adjustment
6. Color gain coarse adjustment
7. White balance adjustment
8. Indoor white gain adjustment
9. Color gain adjustment
10. Auto white balance adjustment
11. Outdoor white gain adjustment
12. Iris AE adjustment

* The above 1. Auto-focus function adjustment in the auto-focus function adjustment mode, whereas the other adjustments are made in the camera signal system adjustment mode.

(6) Replacement procedure of gyro unit

1) When replacing E^2PROM on lens unit of camera head with the gyro unit not replaced

Since the adjustment data of gyro is written in E^2PROM, copy the data of addresses "0864, 0865, 0866, 0867" and rewrite them after replacement.

2) When replacing the gyro sensor: RMC1001, RMC1002

After replacing with the specified gyro sensor, write the following data in the addresses "0864, 0865, 0866, 0867".

Ref No.	Part code	Address	Data
RMC1002	Replacement with RSNSG0004CEZZ	0864	02
		0865	30
RMC1001	Replacement with RSNSG0013CEZZ	0866	04
		0867	00

9-2-4. Adjustment procedures

Item	Adjustment method

(1) Auto-focus adjustment

Set the unit to the auto-focus function adjustment mode and write data to the address "0001" one after another. This executed the adjustments automatically. The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "00FF" is written to the address. After each adjustment, make sure that the adjustment has been made properly, and then go on to the next adjustment item.

Address	Data	Adjustment item
0001	0012	WIDE end adjustment
	0006	WIDE end focus ∞ position adjustment
	0008	TELE end focus ∞ position adjustment
	000D	Zoom tracking adjustment

Note 1: To adjustment of ∞ position is executed by actually picking up the image of subject. For this adjustment use the subject with clear profile.
Especially, if the adjustment of TELE end focus ∞ position is made without picking up the image of remote subject, adjustment failure may occur.
Adjustment of WIDE end focus ∞ position: 3 m or more
Adjustment of TELE end focus ∞ position: 50 m or more

Note 2: In case of ∞ position adjustment the field depth is important to ensure the adjustment accuracy. If the field depth is high, the focus becomes too stable , which may cause incorrect adjustment of ∞ position. Therefore the adjustment must be made with low field depth (with iris opened).

The iris can be opened with the high-speed shutter.

1. It returns to the normal operation mode.
2. In the normal operation mode, set the high-speed shutter mode until the iris is opened. (Refer to the operation manual.)
3. Display “CAM ADJ” with the remote control for service.
4. It shifts to the auto-focus adjustment mode.
5. Perform the ∞ position adjustment.
6. After completing the ∞ position adjustment, return the high-speed shutter mode to the normal mode.

In the camera signal system adjustment mode (write the data "□□00" to the address "0000"), set the unit to the adjustment mode.

(2) Iris/ND Meter basic adjustment

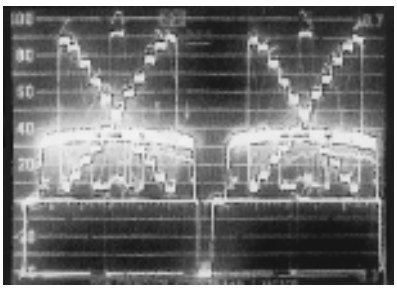
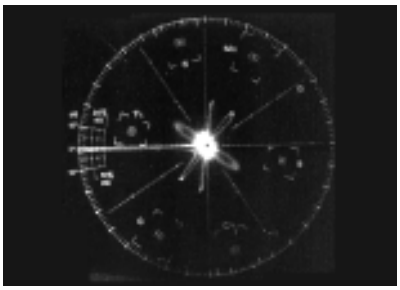
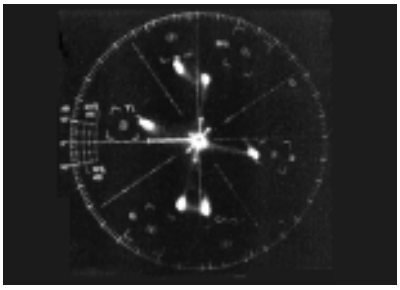
This is for adjusting the operating point of the hole element installed in the iris meter of the lens.
The adjustment is automatically done by sequentially writing the data at the address "0001" in the camera signal system adjustment mode.The items to be adjusted are as listed below. Every time an adjustment is made properly, the data "00FF" is written to the address.

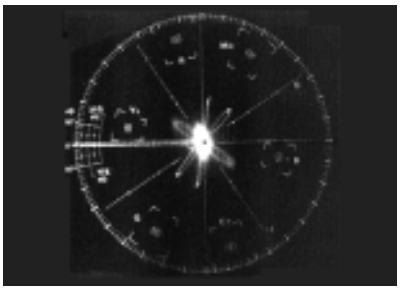
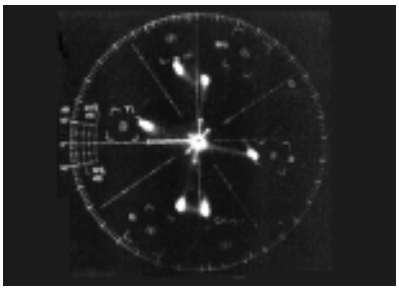
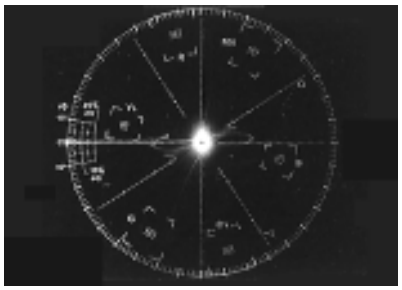
Address	Data	Adjustment item
0001	0009	Hall offset adjustment
	000A	Iris offset adjustment
	000B	Iris close adjustment

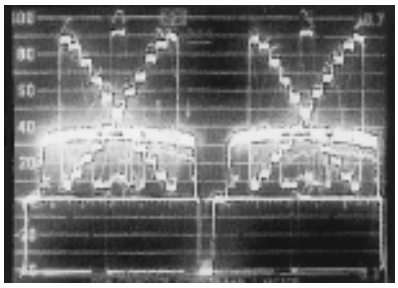
(3) Black balance adjustment/A/F noise adjustment

1)Prior to the adjustment, initialize the data for the addresses "0500", "0502", "0504", "0506", "0508", "050A".
Write "FFFF" to all of these address.

2) Write the data "□□01" to the address "0001" This starts the adjustment automatically.
When the adjustment is completed properly, the data "00FF" is written automatically.

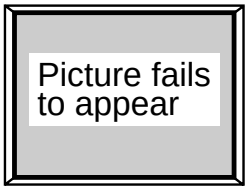
<table>
<tr><th>Item</th><th>Adjustment method</th></tr>
<tr><td>(4) Iris AE coarse adjustment
• Measurement terminal:
S terminal luminance signal output (75 Ω termination)
• Address: "0002" AE_CVT
• Measuring instrument:
Oscilloscope (horizontal sync)
• Object:
Grey scale
• Data variation width:
"0000" to "00FE"</td><td>(1) Video output is observed with the oscilloscope in the grey scale standard record state, the data of address "0002" is rewritten, and the luminance signal level is adjusted white to 760 ± 10mVp-p, gray of the background 420 ± 10mVp-p.
 
100mV/div</td></tr>
<tr><td>(5) White balance coarse adjustment
• Measurement terminal:
EE output
• Address:
"0128" CGAIN_KR_W
"012A" CGAIN_KB_W
• Measuring instrument:
Vector scope
• Object:
Grey scale
• Data variation width:
"0000" to "03FF"</td><td>(1) Indication on the vector scope is observed in the grey scale standard record state, data of address "0128" and "012A" are rewritten, and an adjustment is made so that the luminous dot is located in the position of burst ratio:
R-Y 0 ± 5%
B-Y 0 ± 5%
  </td></tr>
<tr><td>(6) Color gain coarse adjustment
• Measurement terminal:
EE output
• Address:
"013A" CGIN RYG
"013C" CGIN BYG
"0138" CMAT RYG
"0136" CMAT BYG
"07DE" Yellow amplitude
"07DD" Yellow phase
• Measuring instrument:
Vector scope
• Object:
Color bar chart
• Data variation width:
"0000" to "00FF"</td><td>(1) The color bar chart is imaged, and the picture angle is adjusted so as to get white level 700 mV. Indication on the vector scope is observed, the data of address "013A", "013C", "0138", "0136", "07DE"and "07DD" are rewritten, and setting is made so that the red, blue and yellow luminous dots are located in the following positions. (The gain of vector scope must be set on 75% amplitude point on the B-Y axis.)
 
<table><tr><th></th><th></th><th>Adjustment address</th></tr><tr><td>Red amplitude</td><td>2.15 ± 0.1 time (burst ratio)</td><td>: "013A"</td></tr><tr><td>Blue amplitude</td><td>1.75 ± 0.1 time (burst ratio)</td><td>: "013C"</td></tr><tr><td>Yellow amplitude</td><td>1.50 ± 0.1 time (burst ratio)</td><td>: "07DE"</td></tr><tr><td>Red phase</td><td>103° ± 2°</td><td>: "0138"</td></tr><tr><td>Blue phase</td><td>343° ± 2°</td><td>: "0136"</td></tr><tr><td>Yellow phase</td><td>154° ± 2°</td><td>: "07DD"</td></tr></table></td></tr>
</table>

Item	Adjustment method
(7) White balance adjustment • Measurement terminal: EE output • Address: "0128" INDOOR_W/B R "012A" INDOOR_W/B R • Measuring instrument: Vector scope • Object: Grey scale • Data variation width: "0000" to "03FF"	(1) White balance adjustment is performed repeatedly. 
(8) Indoor white gain adjustment • Measurement terminal:– • Address: 0001 • Measuring instrument:– • Object: White pattern • Data variation width:–	(1)The adjustment is automatically done by writing the data "05" at the address "001" in the signal system adjustment mode. When the adjustment is normally completed, the data "FF" will be return to the address "001". If another data except "FF" is returned, it will be judged as the poor adjustment.
(9) Color gain adjustment • Measurement terminal: EE output • Address: "013A" CGIN RYG "013C" CGIN BYG "0138" CMAT RYG "0136" CMAT BYG "07DE" Yellow amplitude "07DD" Yellow phase • Measuring instrument: Vector scope • Object: Waveform monitor color bar chart • Data variation width: "0000" to "00FF"	(1) Color gain adjustment is performed repeatedly.  Adjustment address Red amplitude 2.15 ± 0.05 time (burst ratio) : "013A" Blue amplitude 1.75 ± 0.05 time (burst ratio) : "013C" Yellow amplitude 1.50 ± 0.05 time (burst ratio) : "07DE" Red phase 103° ± 1° : "0138" Blue phase 343° ± 2° : "0136" Yellow phase 154° ± 2° : "07DD"
(10) Auto white balance adjustment • Measurement terminal: EE output • Address: "000C" OUTDOOR R "000E" OURDOOR B • Measuring instrument: Vector scope • Object: Grey scale • Data variation width: "0000" to "03FF"	(1) The color temperature conversion filter (LB165) is mounted in front of lens. (2) Indication of vector scope is observed in the grey scale standard record state, and an adjustment is made so that the luminous dots are located in the following positions: R-Y 0 ± 5% (burst ratio) B-Y 0 ± 5% (burst ratio) 
(11) Outdoor white gain adjustment • Measurement terminal:– • Address: 0001 • Measuring instrument:– • Object: White pattern • Data variation width:–	(1) Attach the color temperature conversion filter (LB165) in front of the lens. (2) The adjustment is automatically done by writing the data "06" at the address "001" in the signal system adjustment mode. When the adjustment is normally completed, the data "FF" will be return to the address "001". If another data except "FF" is returned, it will be judged as the poor adjustment.

Item	Adjustment method
(12) Iris AE adjustment • Measurement terminal: S terminal luminance signal output (75 Ω termination) • Address: "0002" AE_CVT • Measuring instrument: Oscilloscope (horizontal sync) • Object: Grey scale • Data variation width: "0000" to "00FE"	(1) Set the unit to the normal operation mode (write the data "□□FF" to the address "0000"). (2) Video output is observed with the oscilloscope in the grey scale standard record state, the data of address "0002" is rewritten, and the luminance signal level is adjusted white to 760 ± 10mVp-p, gray of the background 420 ± 10mVp-p.  100mV/div

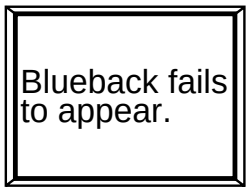
10. USEFUL TIPS (PROBLEMS DIFFER FROM THOSE FOUND ON VHS OR 8MM DECKS BECAUSE THE SIGNALS ARE DIGITALLY PROCESSED.)

Camera (EE mode)



Major circuits to be checked
- CCD
- Camera circuits (CDS, ADC, CAM ENGINE)
- MEC/SYS MiCON (IC704)
- VIDEO I/O (IC1401)
- VIO ENGINE (IC4401)

VCR (EE mode)

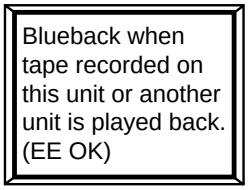


Major circuits to be checked
- MEC/SYS MiCON (IC704)
- CAM ENGINE (IC201)
- REC/PB ENGINE (IC452)

Camera (REC mode)
VCR (PB mode)

Major circuits to be checked
- CAM ENGINE (IC201)
- REC/PB ENGINE (IC452)

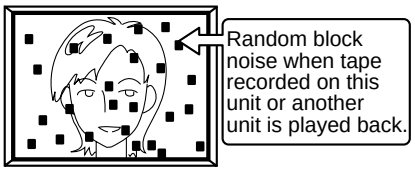
Camera (REC mode)
VCR (PB mode)



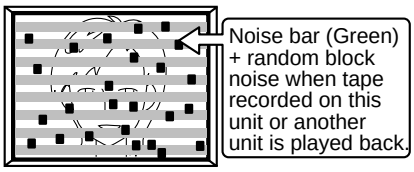
Major circuits to be checked
- EQ/PLL (IC3401)
- Head amplifier (IC301)

* Dirty or defective video head

Camera (REC mode)
VCR (PB mode)



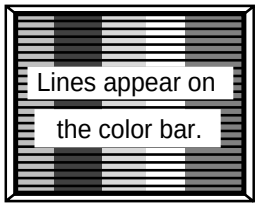
or



Major circuits to be checked
- EQ/PLL (IC3401)
- Head amplifier (IC301)

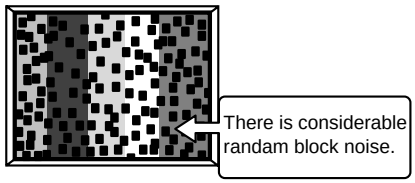
* Dirty or defective video head

VCR (PB mode) + color bar



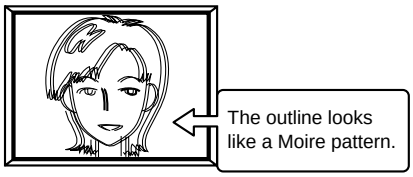
Major circuits to be checked
- CAM ENGINE (IC201)

VCR (PB mode) + color bar



Major circuits to be checked
- Adjustment of the electromagnetic conversion circuit system.

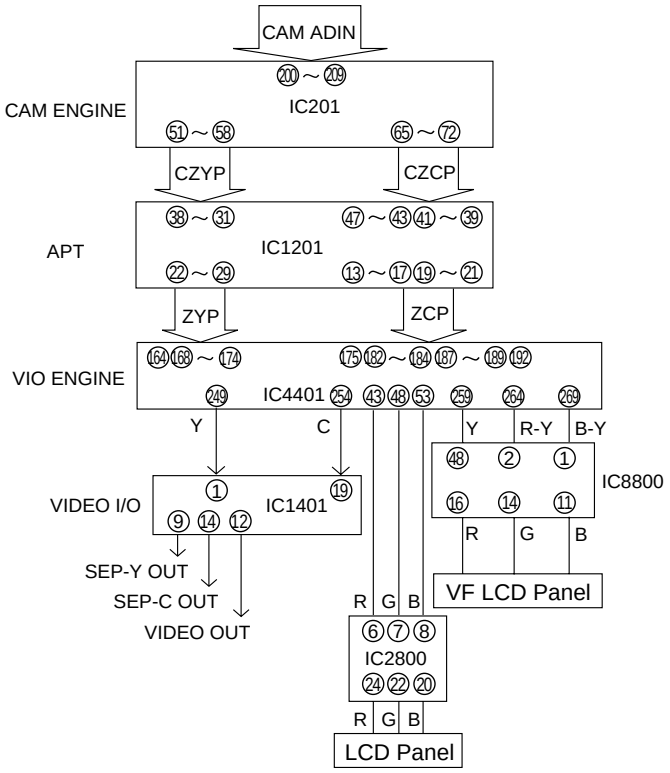
Camera (EE mode)



Major circuits to be checked
- Y data between CAM ENGINE (IC201) and VIO ENGINE (IC4401) is missing.

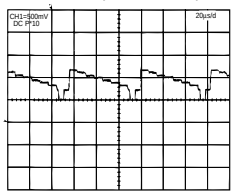
11. SIGNAL FLOW DIAGRAMS

11-1. EE MODE FLOW (VIDEO)

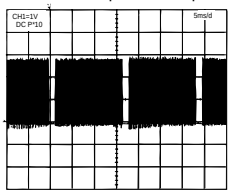


WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)

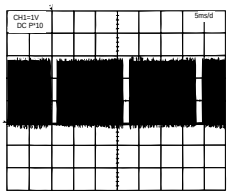
IC4401 249pin Y/YC Output



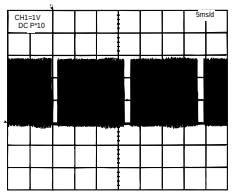
IC4401 170pin ZYP3 Input



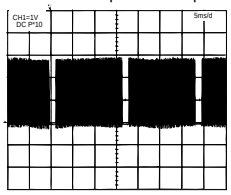
IC4401 124pin CDY3 Output



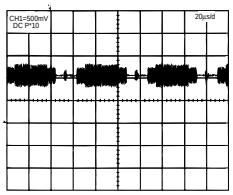
IC4401 134pin CDC3 Output



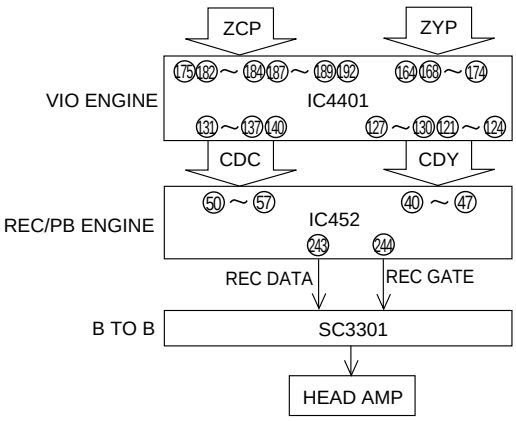
IC4401 184pin ZCP3 Input



IC4401 254pin C Output

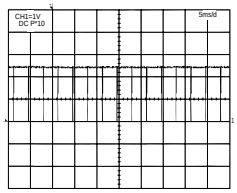


11-2. FLOW IN REC MODE (VIDEO)

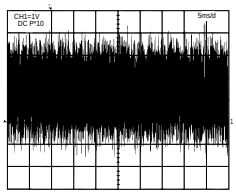


WAVEFORM DIAGRAM (DURING COLOR BAR RECORDING)

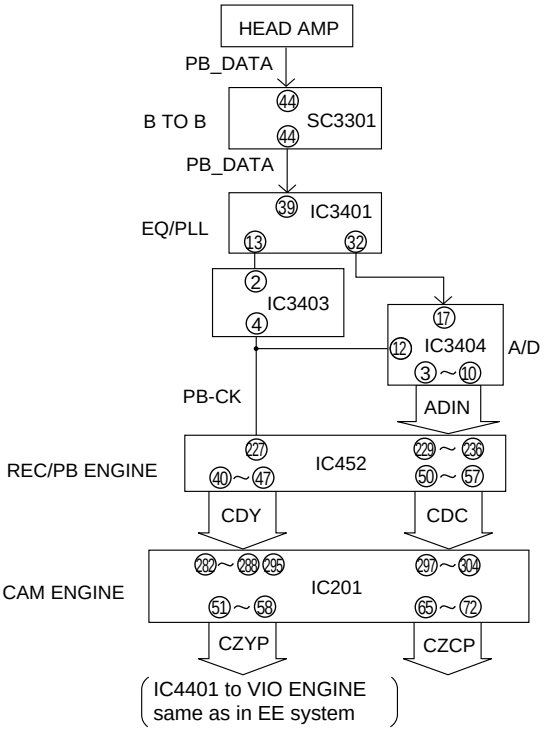
IC452 244pin Rec GATE Output



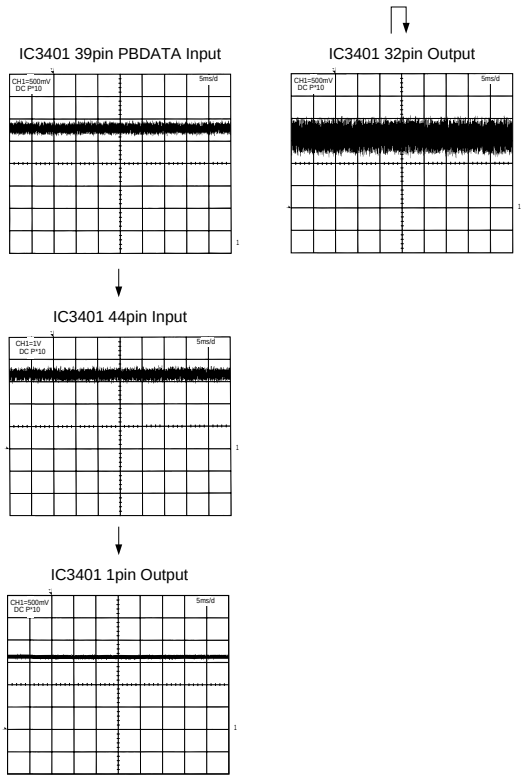
IC452 243pin Rec DATA Output



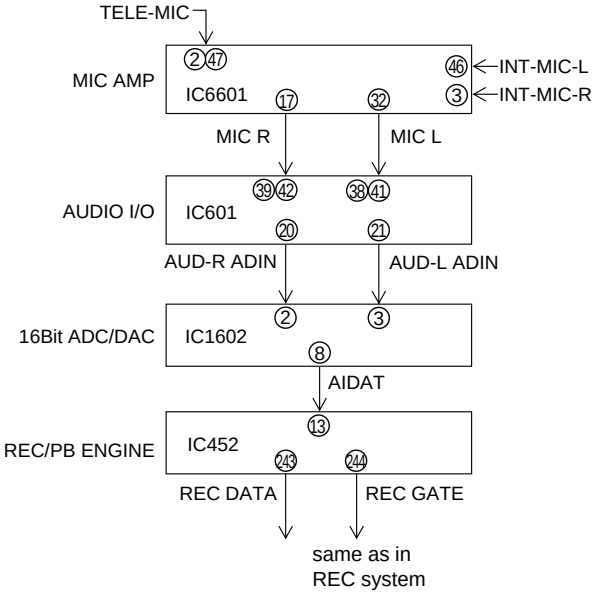
11-3. FLOW IN PB MODE (VIDEO)



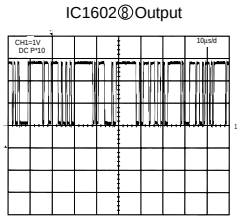
WAVEFORM DIAGRAM (DURING COLOR BAR PLAYBACK)



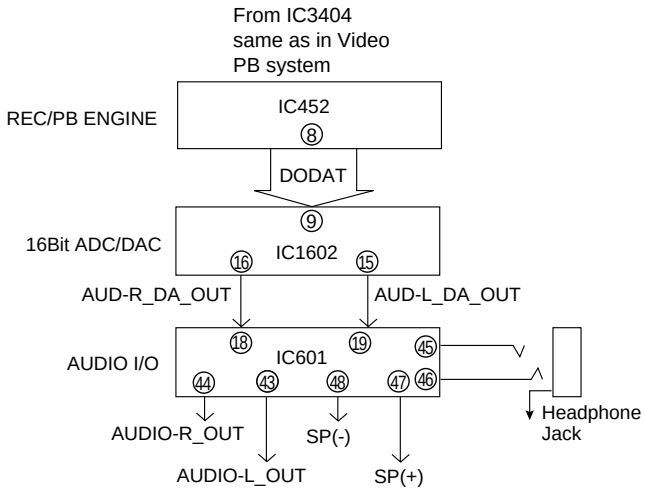
11-4. FLOW IN REC MODE (AUDIO)



WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)

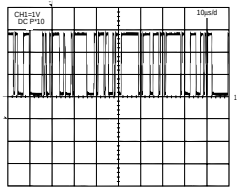


11-5. FLOW IN PB MODE (AUDIO)



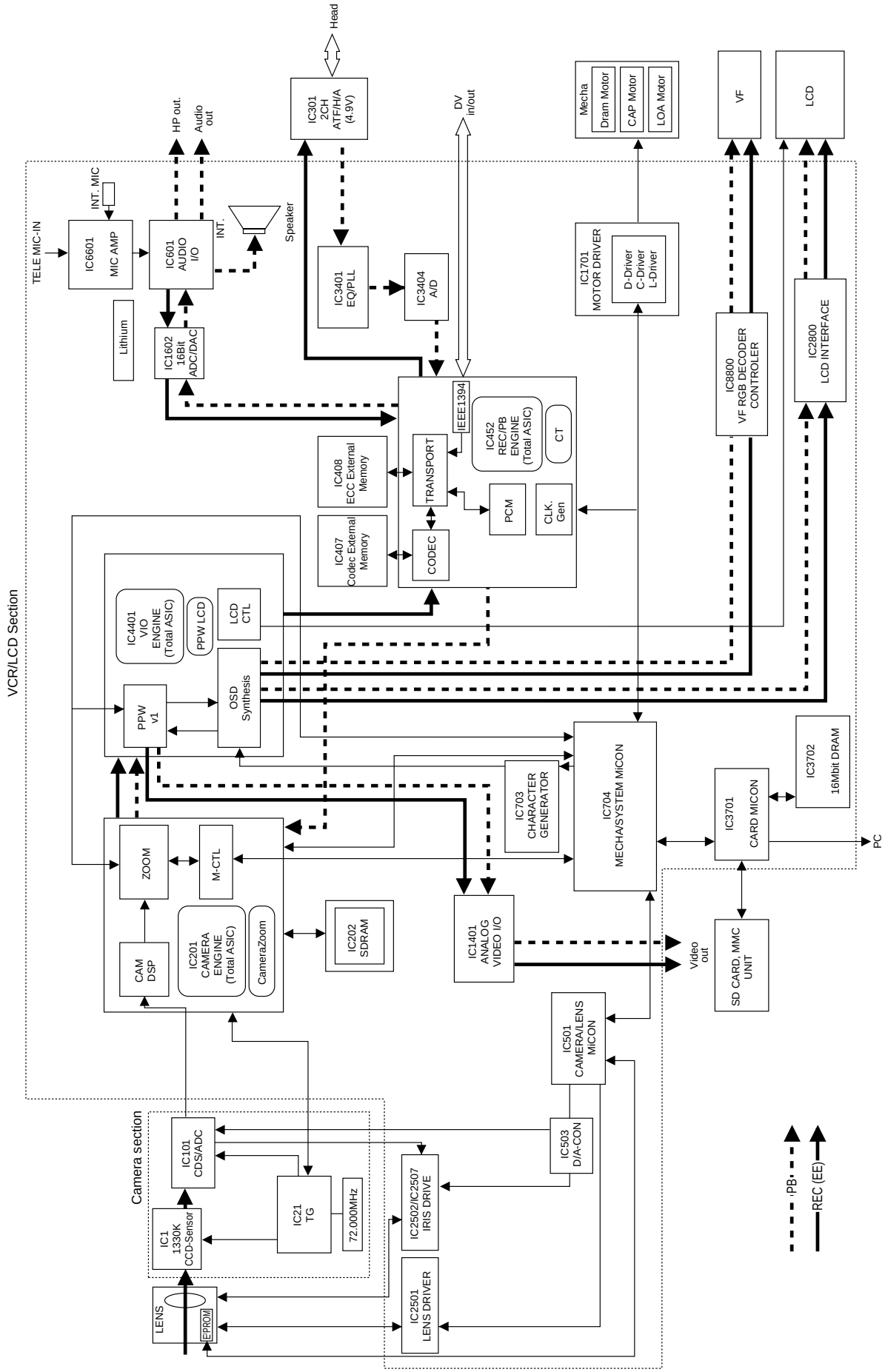
WAVEFORM DIAGRAM (1.6 kHz SINE WAVE)

IC1602⑨DODAT Inout

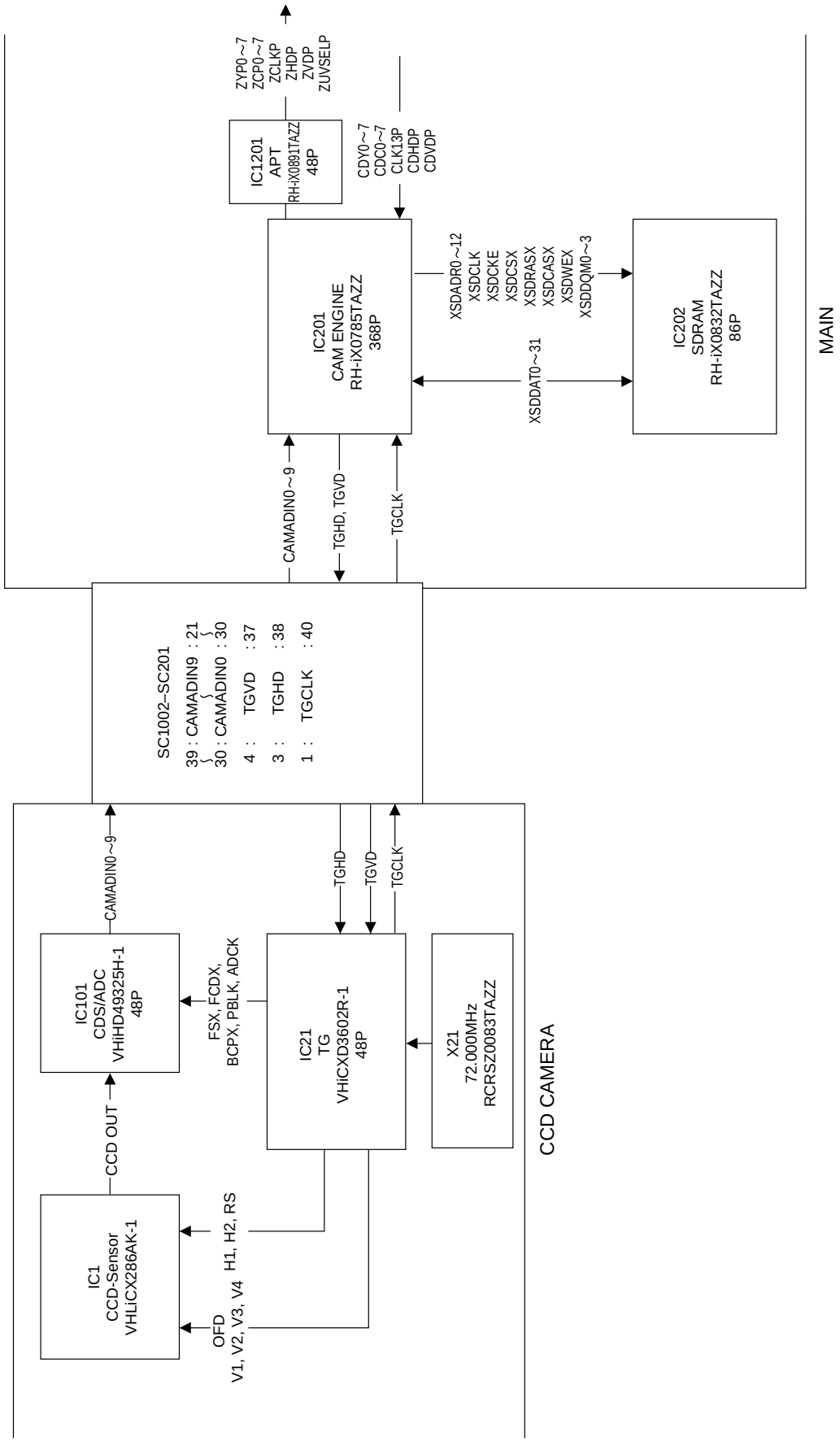


12. BLOCK DIAGRAMS

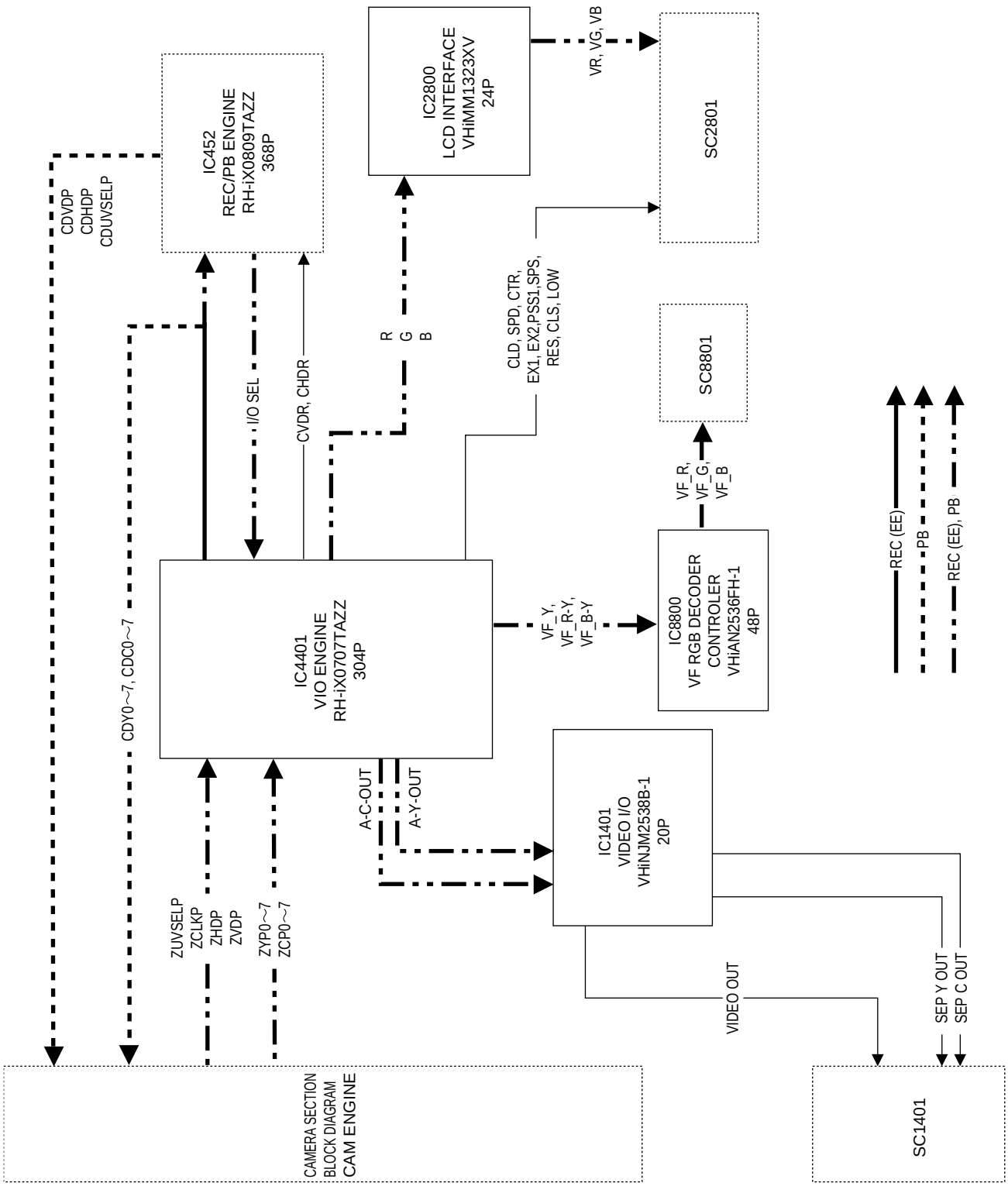
12-1. SYSTEM BLOCK DIAGRAM



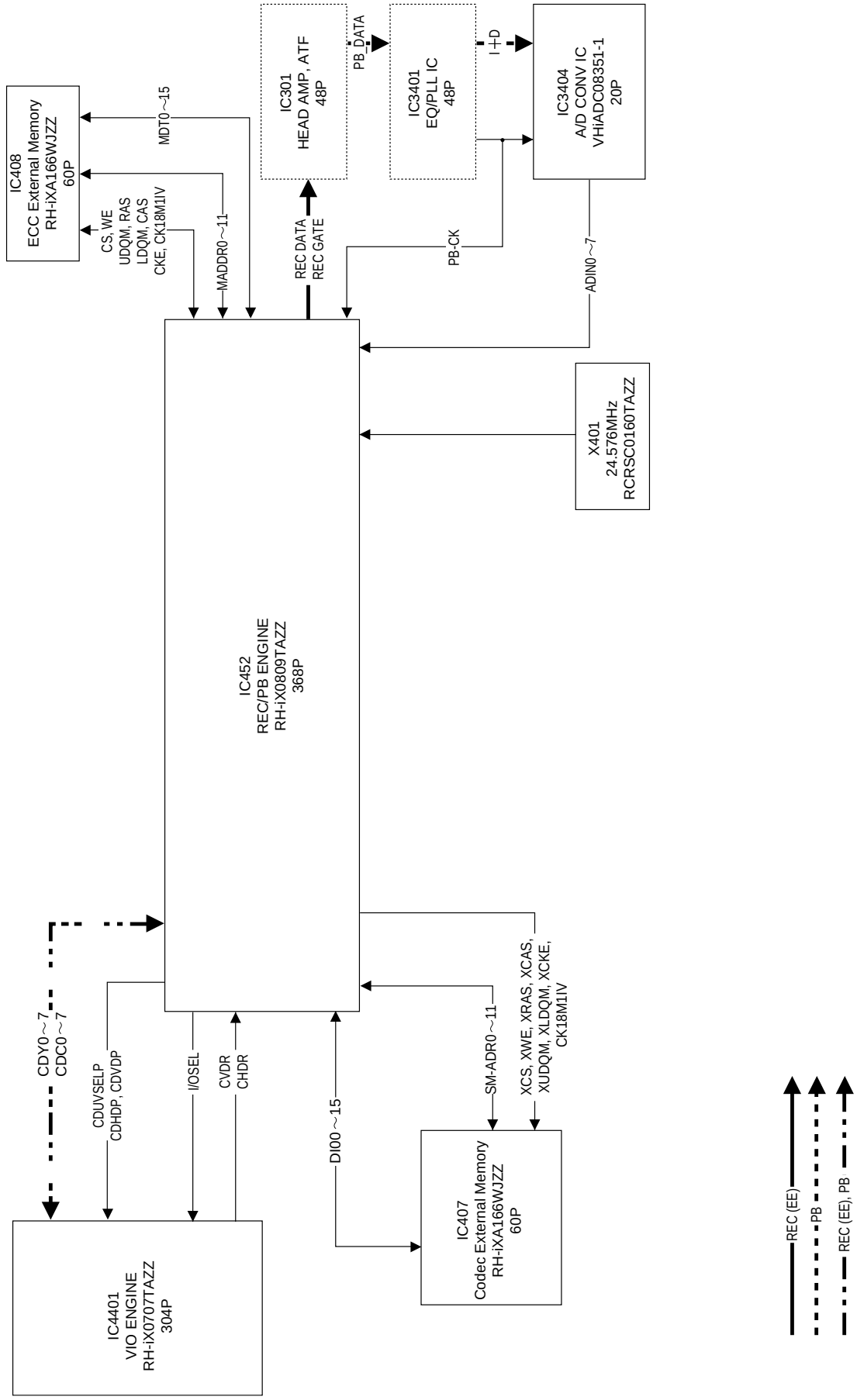
12-2. CAMERA SECTION BLOCK DIAGRAM



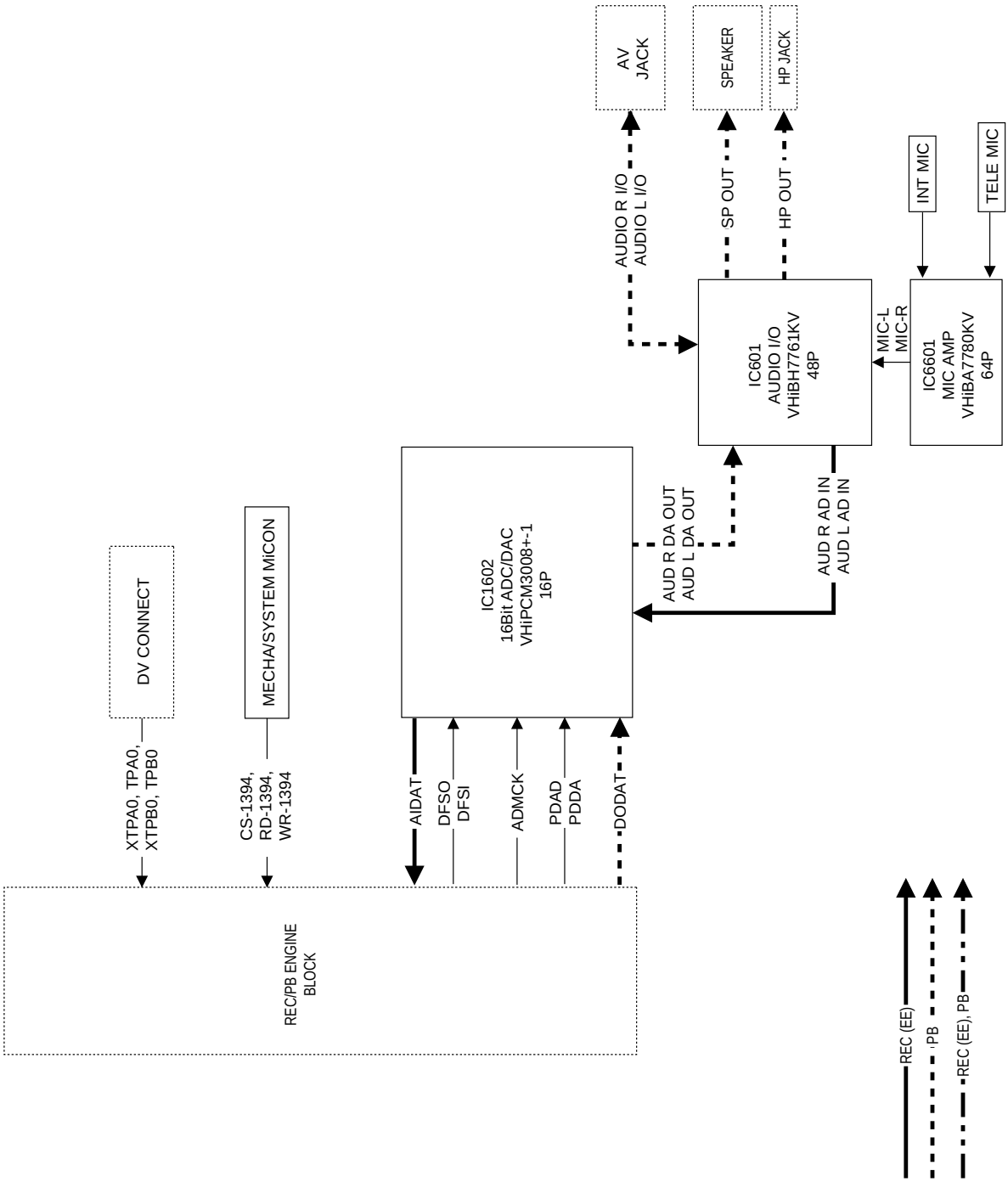
12-3. VIO ENGINE SECTION BLOCK DIAGRAM



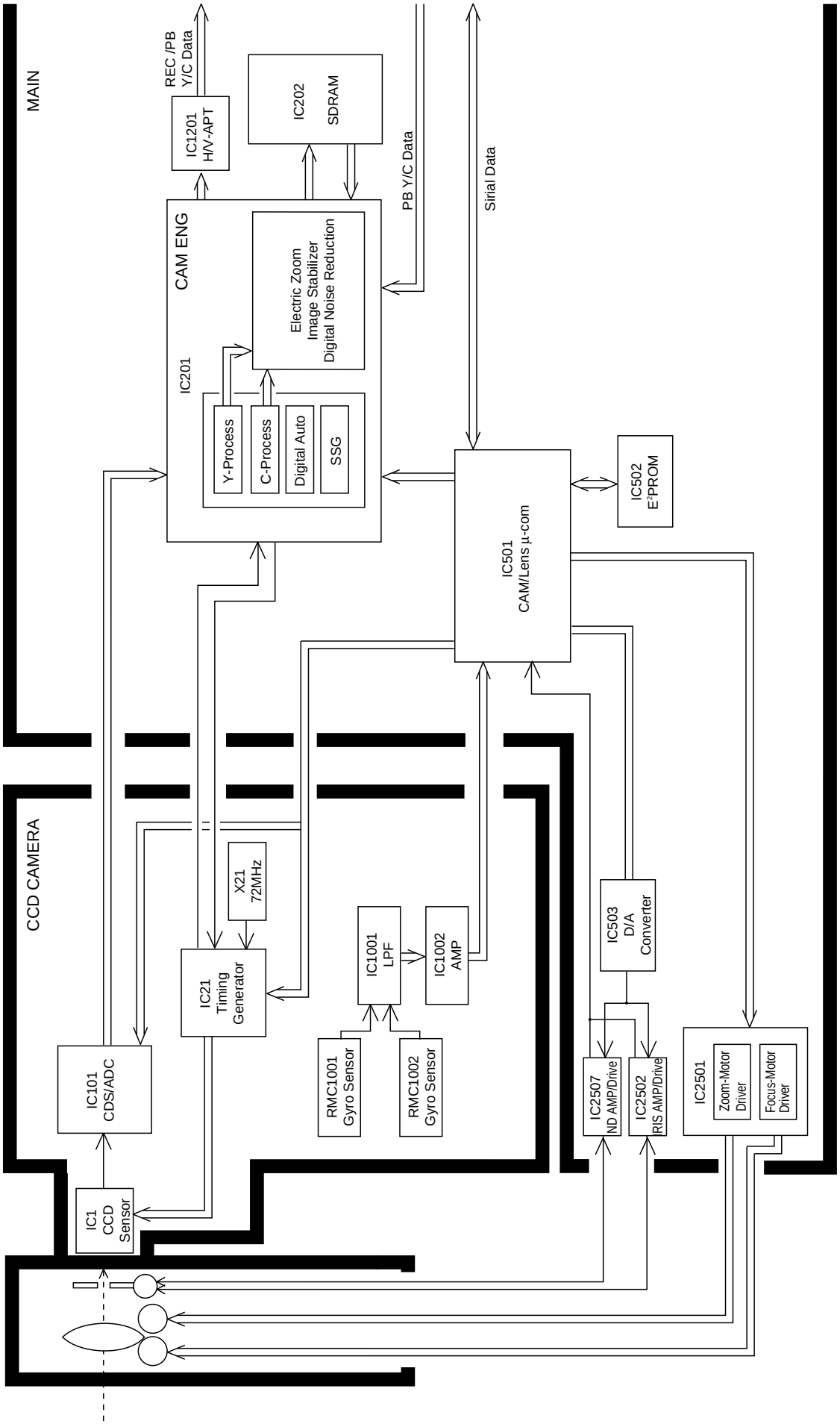
12-4. REC/PB SECTION BLOCK DIAGRAM



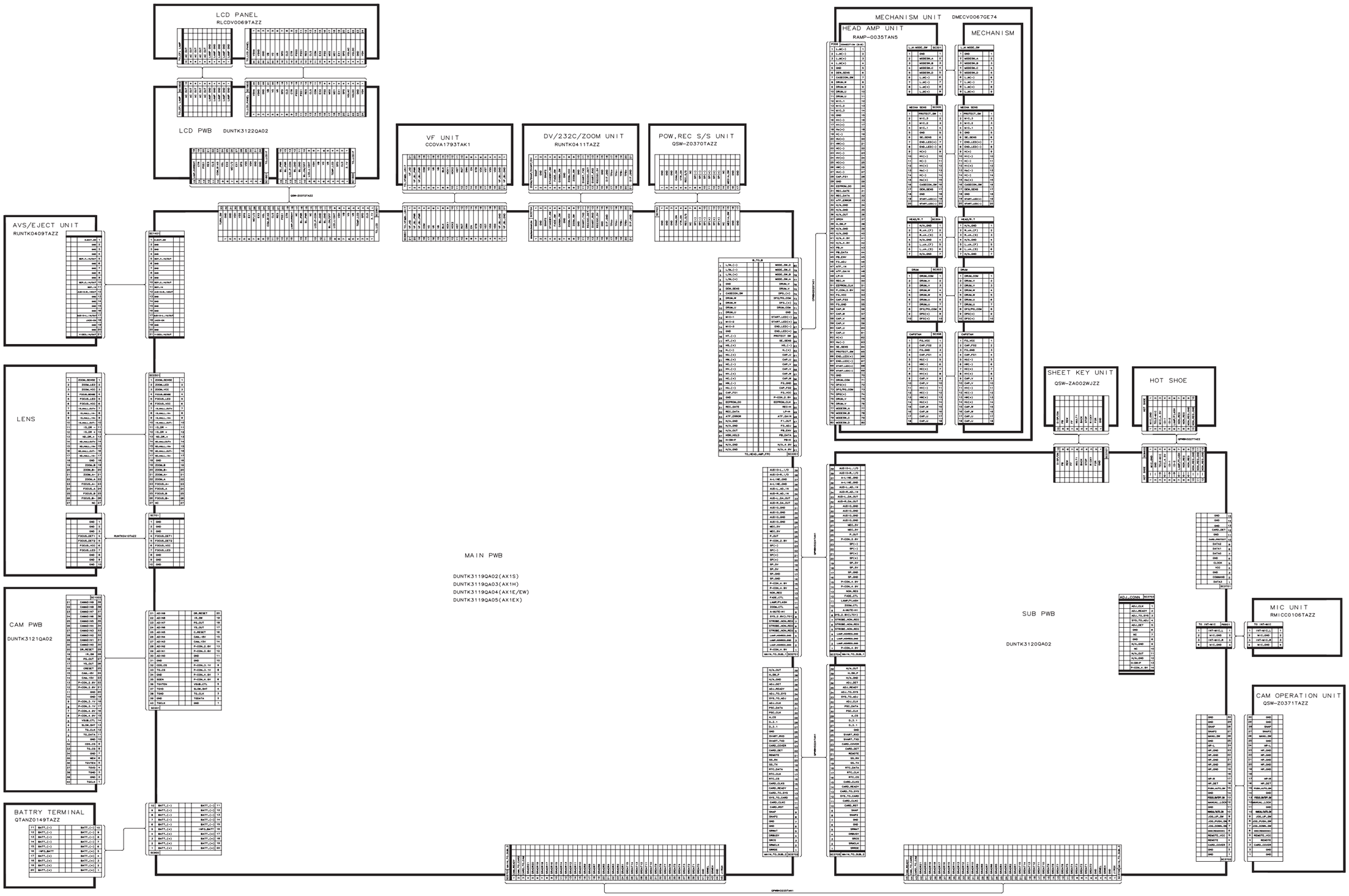
12-5. AUDIO/DIGITAL OUTPUT SECTION BLOCK DIAGRAM



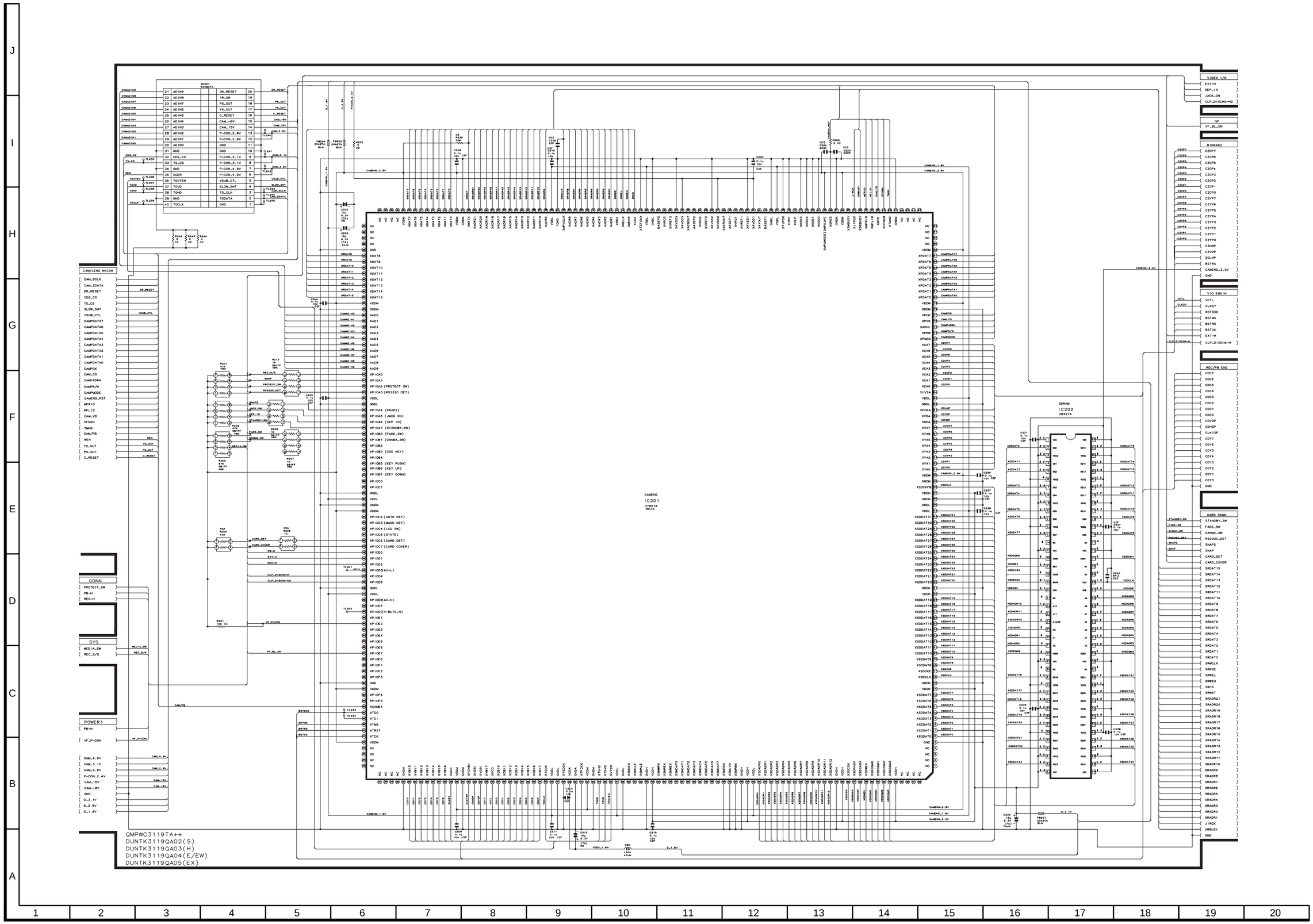
12-6. CAMERA CIRCUIT BLOCK DIAGRAM



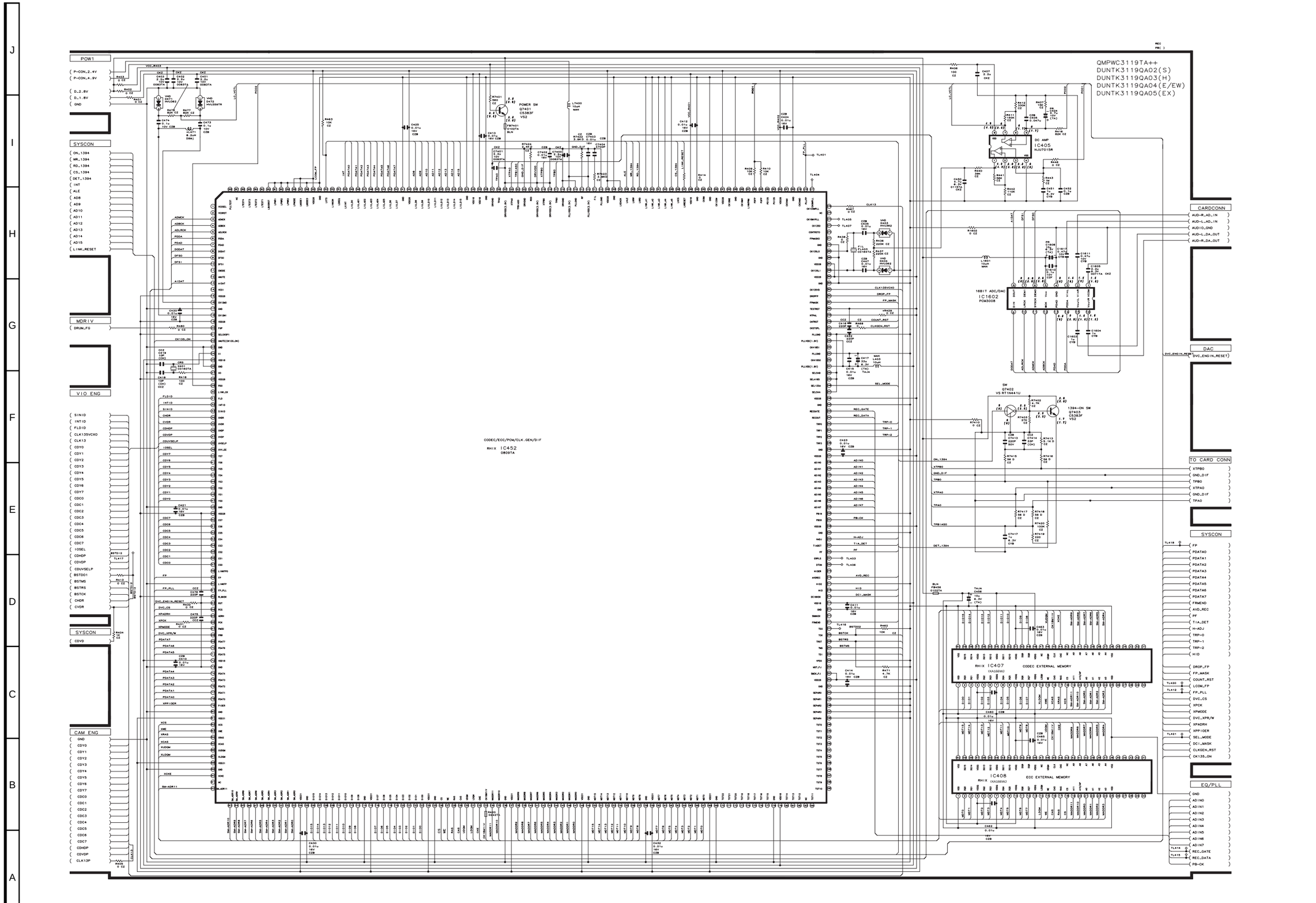
14. SCHEMATIC DIAGRAMS 14-1. OVERALL SCHEMATIC DIAGRAM



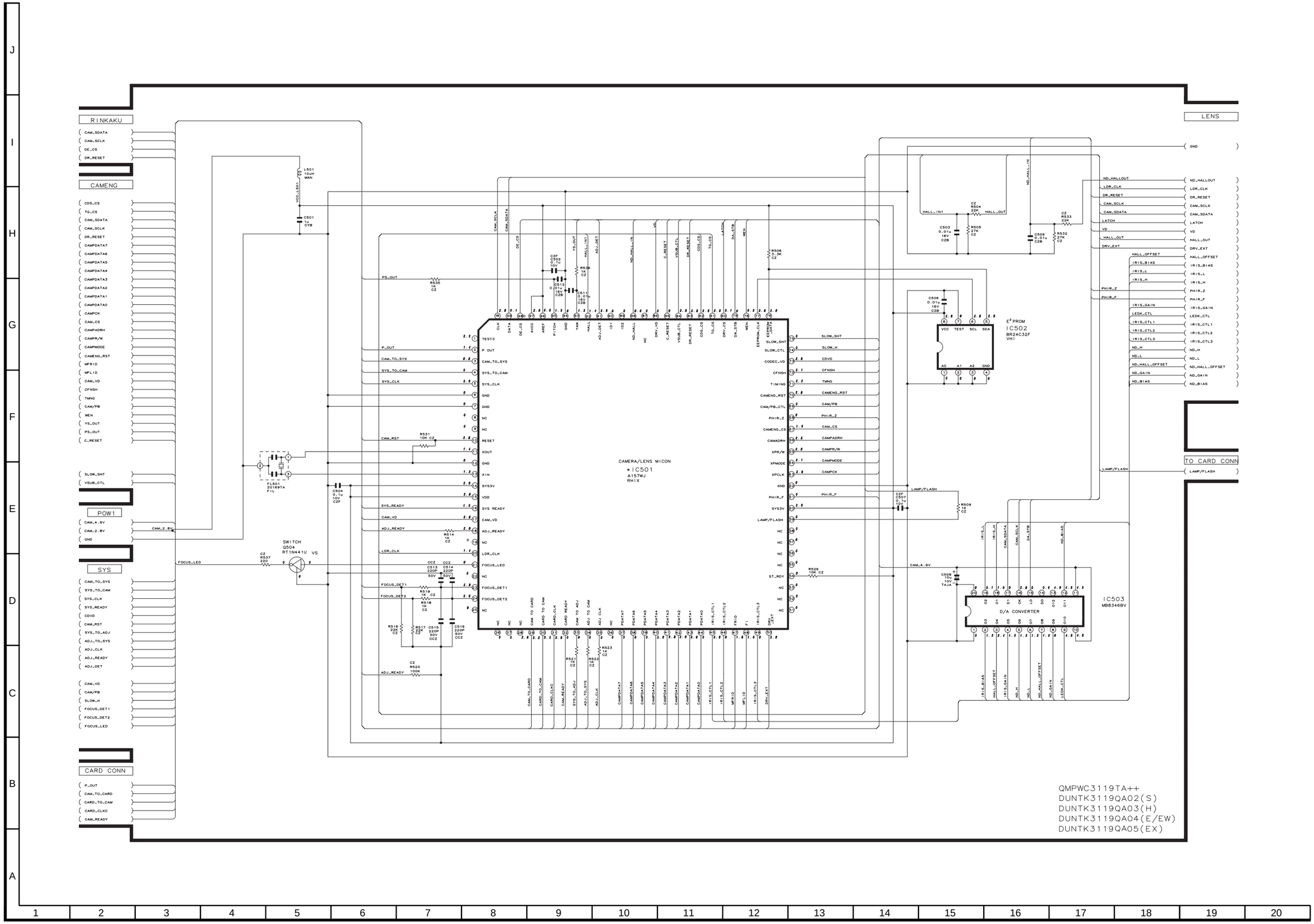
14-2. CAMERA ENGINE SCHEMATIC DIAGRAM



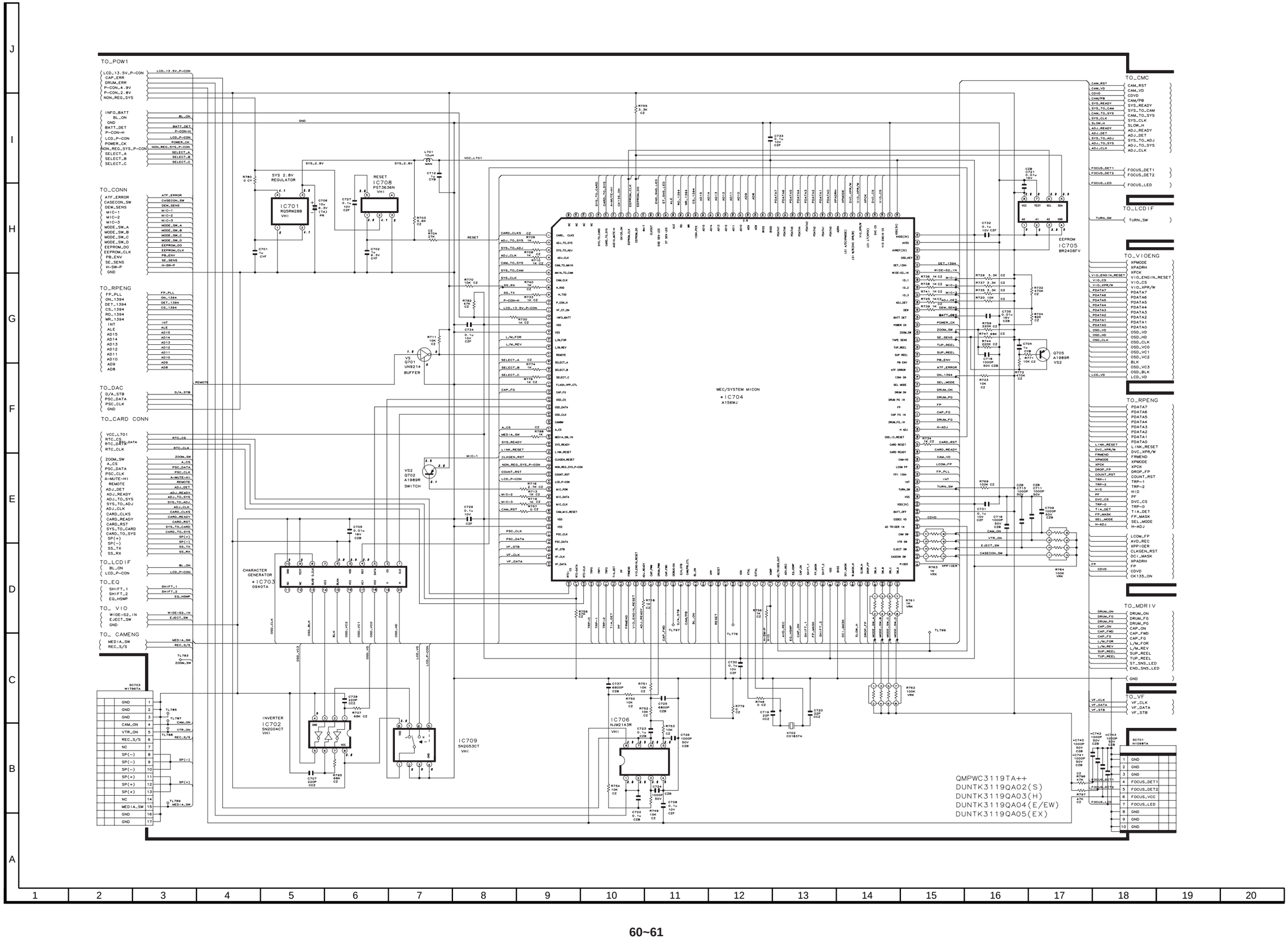
14-3. REC/PB ENGINE SCHEMATIC DIAGRAM



14-4. CMC SCHEMATIC DIAGRAM

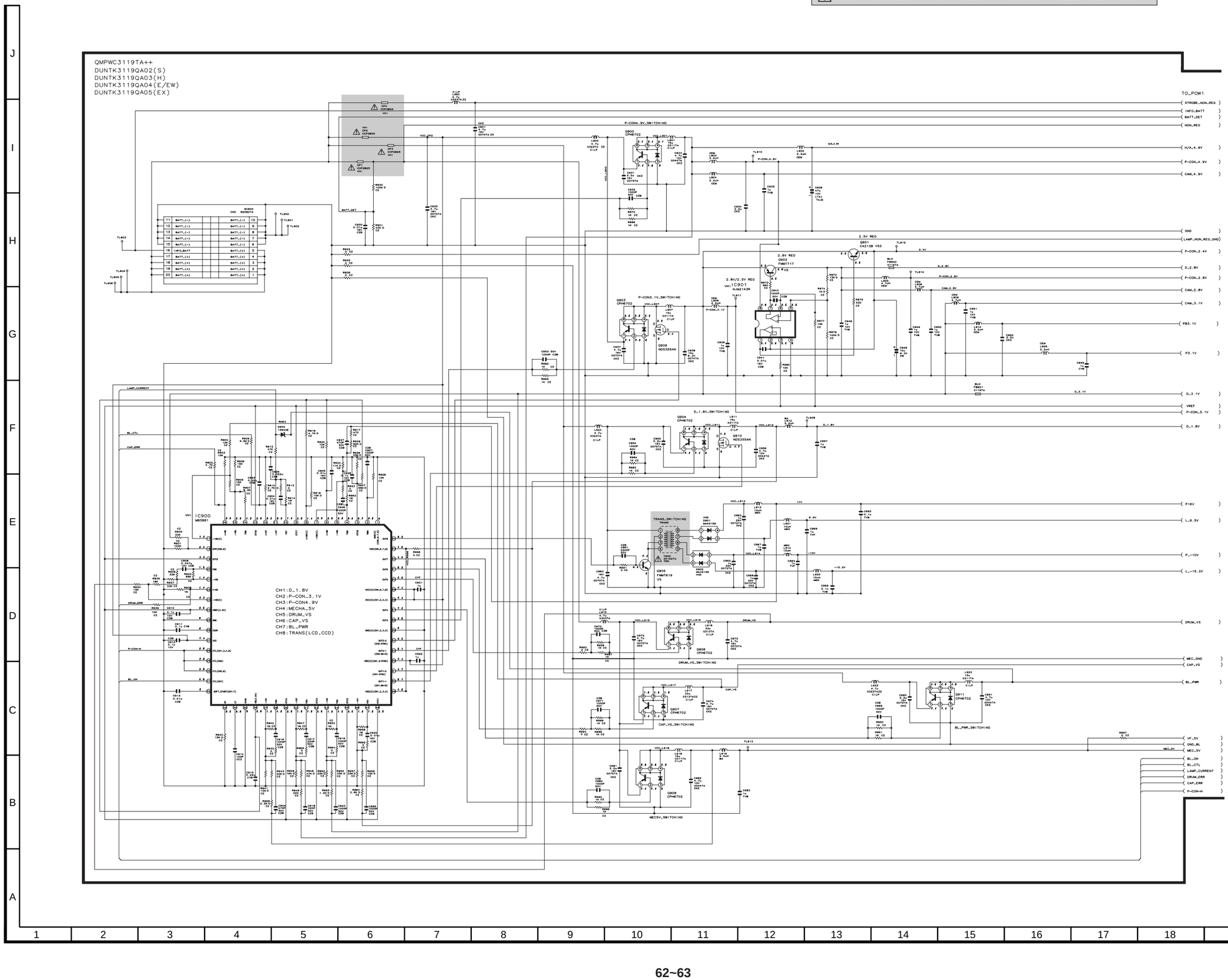


14-5. MEC/SYS MiCON SCHEMATIC DIAGRAM

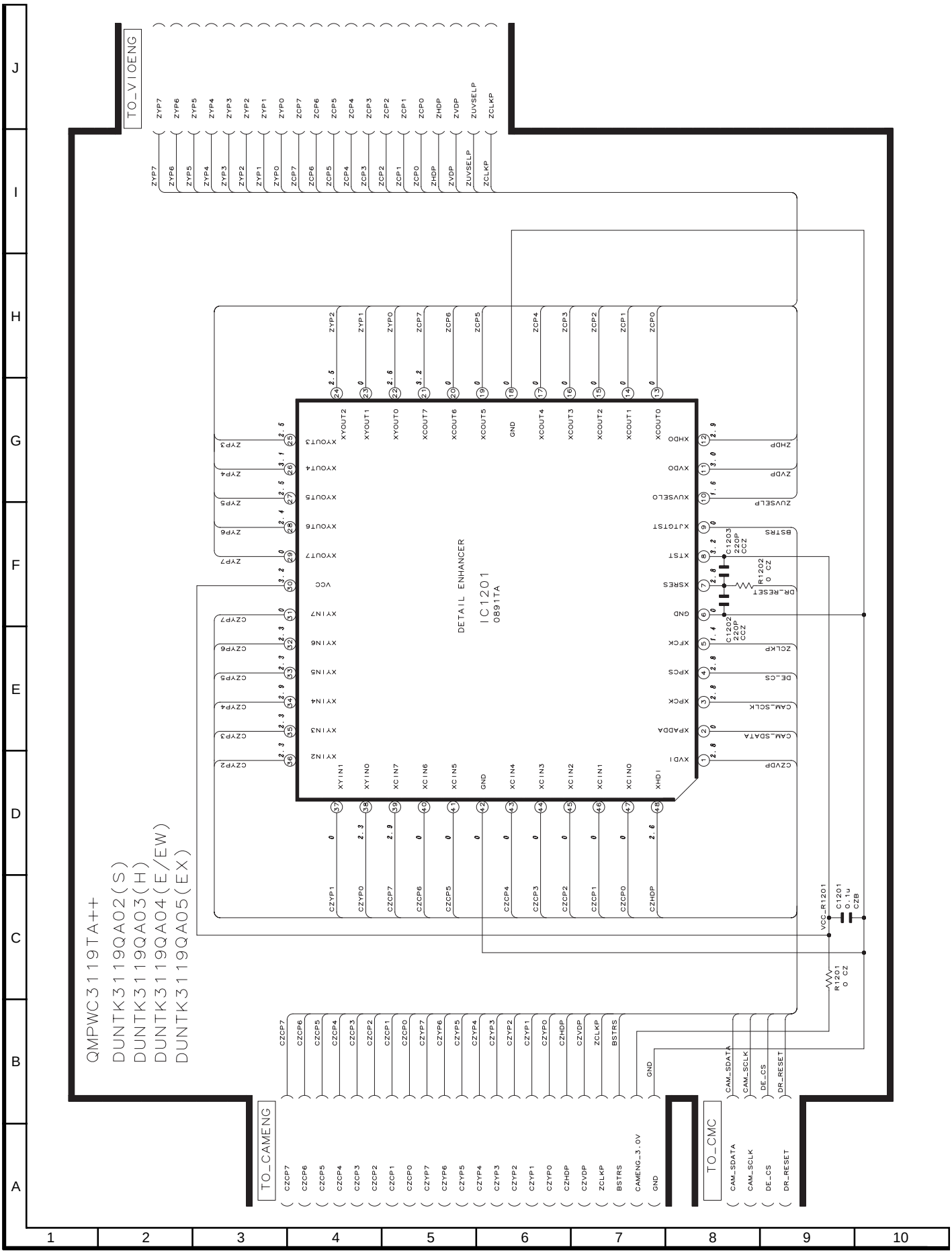


14-6. POWER2 SCHEMATIC DIAGRAM

⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS

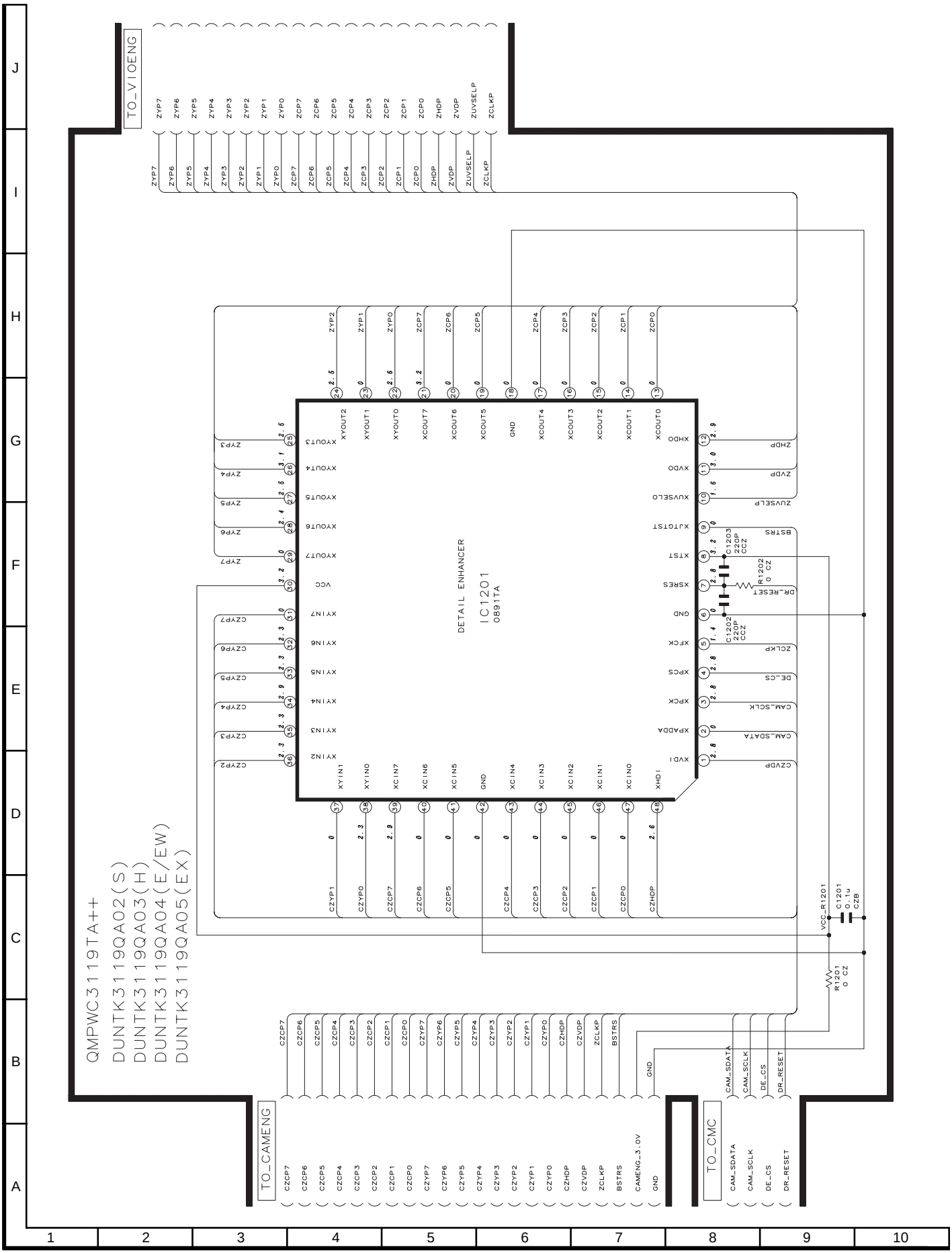


13-7. RINKAKU SCHEMATIC DIAGRAM



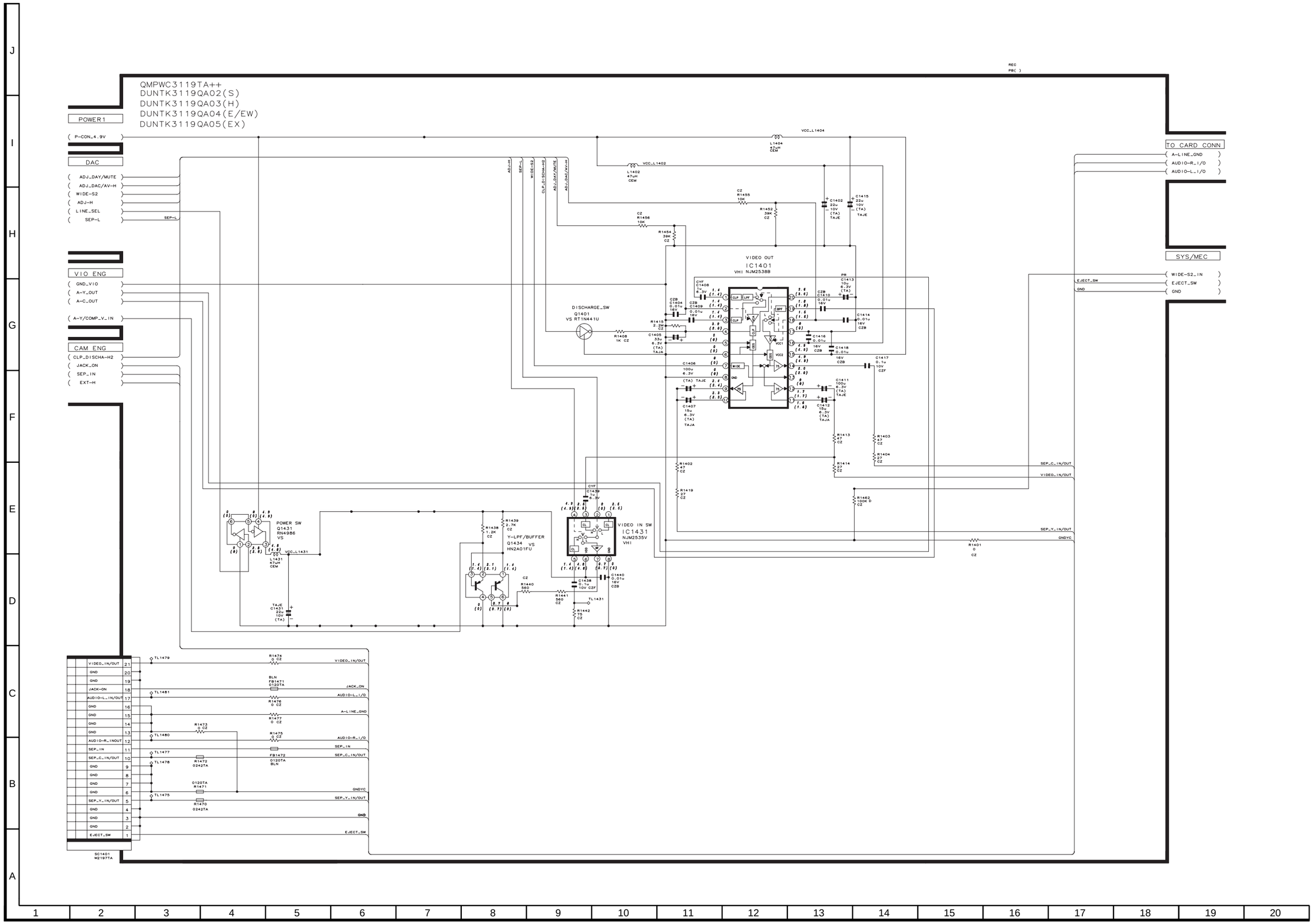
- M E M O -

13-7. RINKAKU SCHEMATIC DIAGRAM

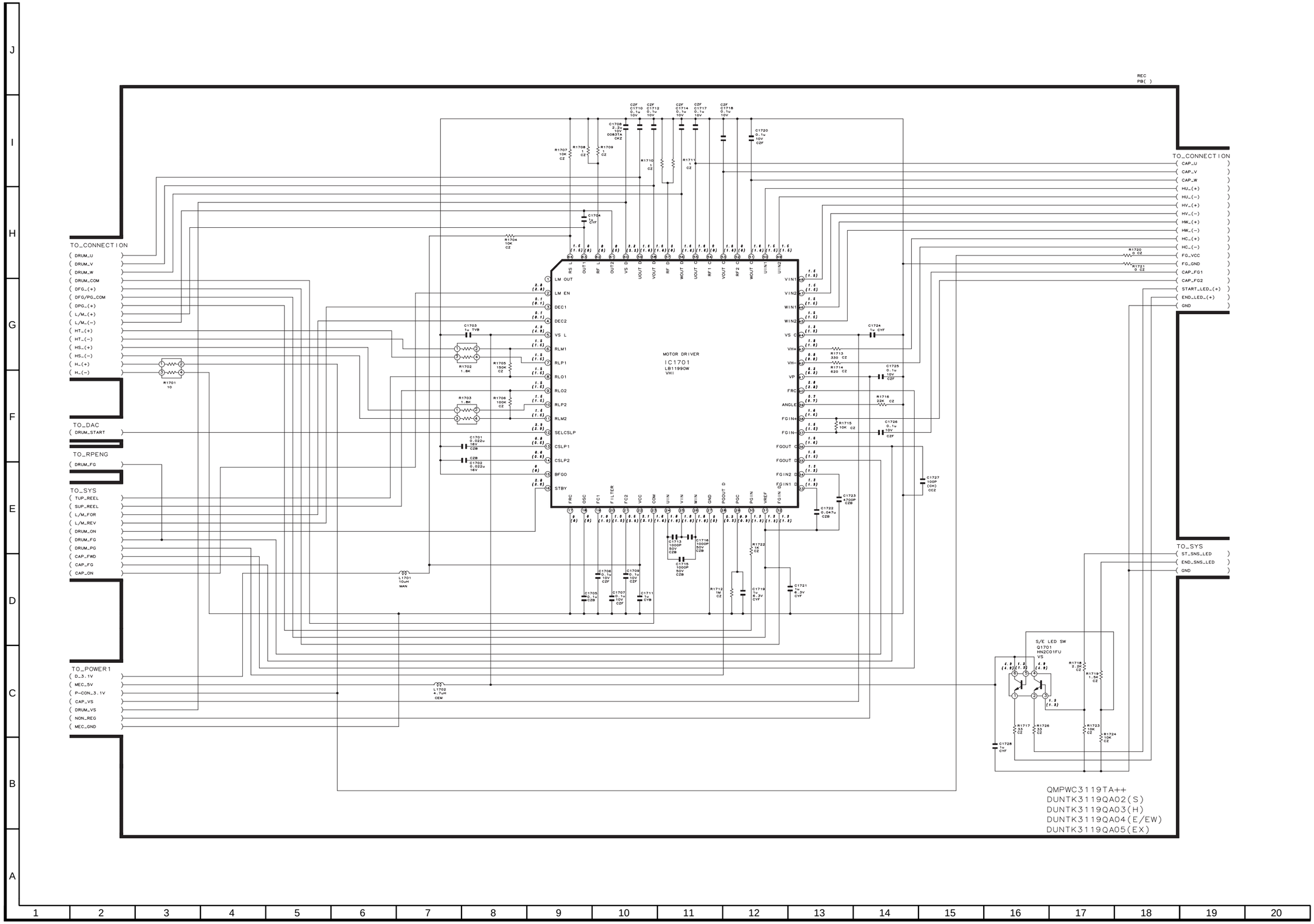


- M E M O -

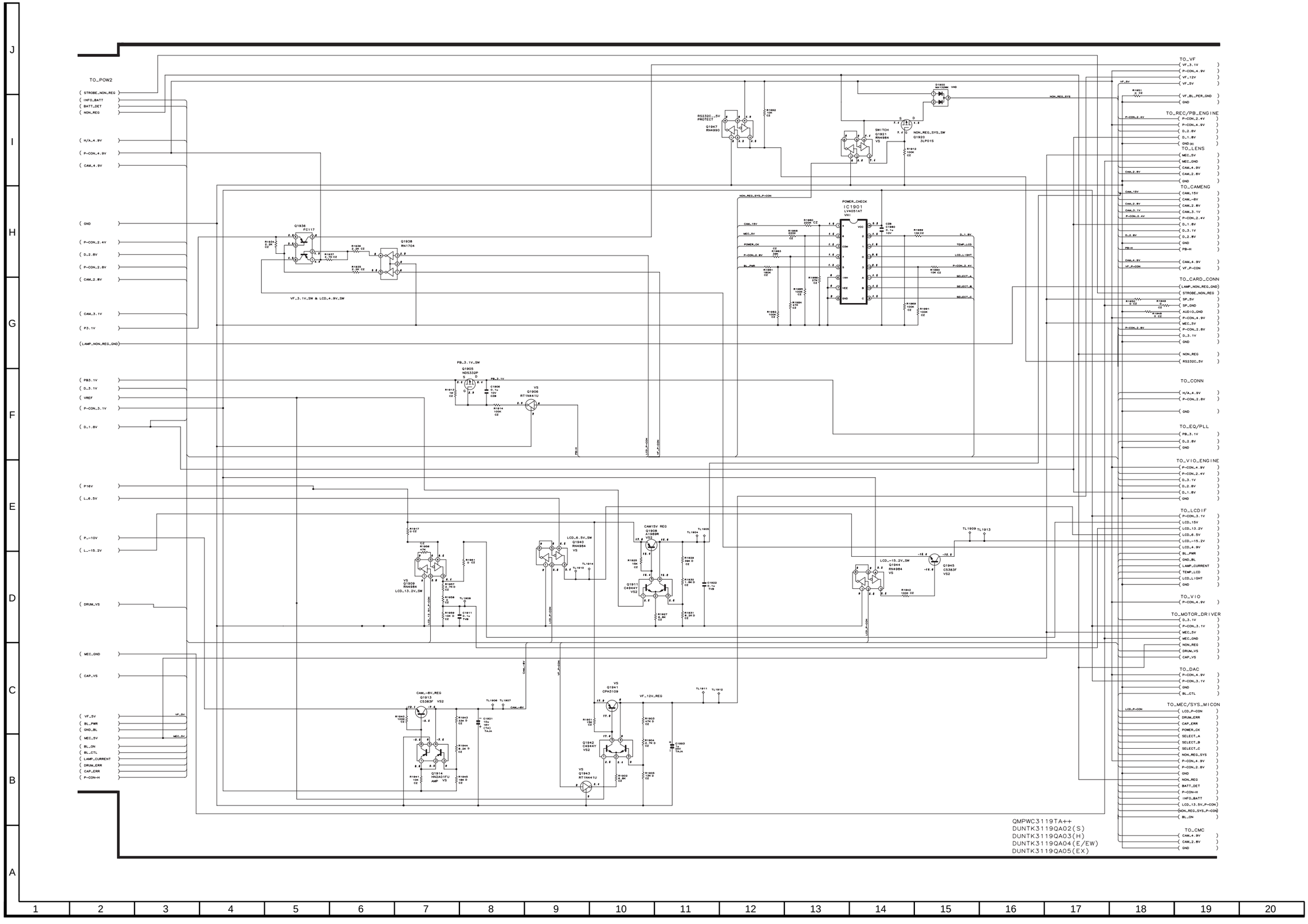
14-8. VIDEO I/O SCHEMATIC DIAGRAM



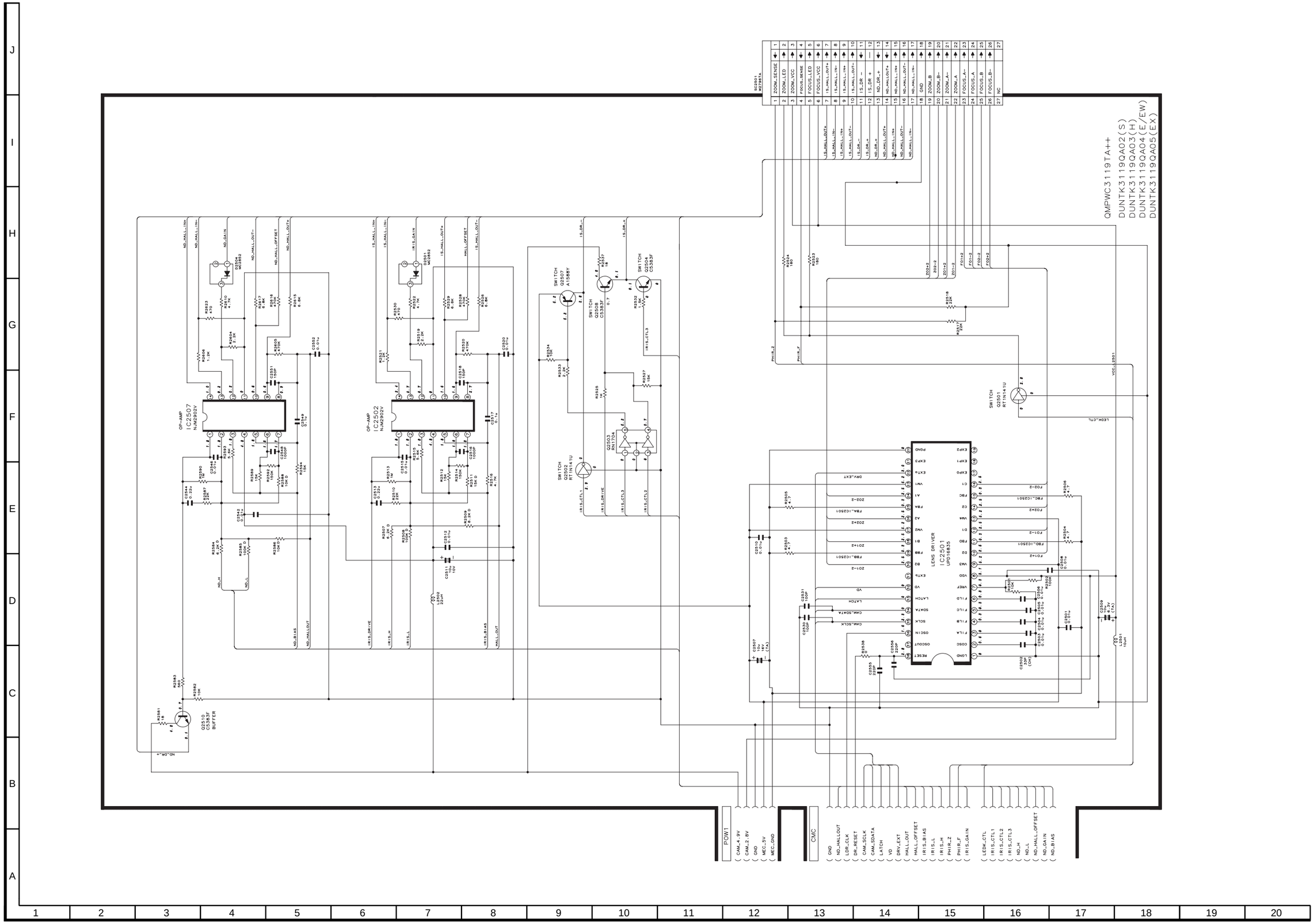
14-9. MOTOR DRIVER SCHEMATIC DIAGRAM



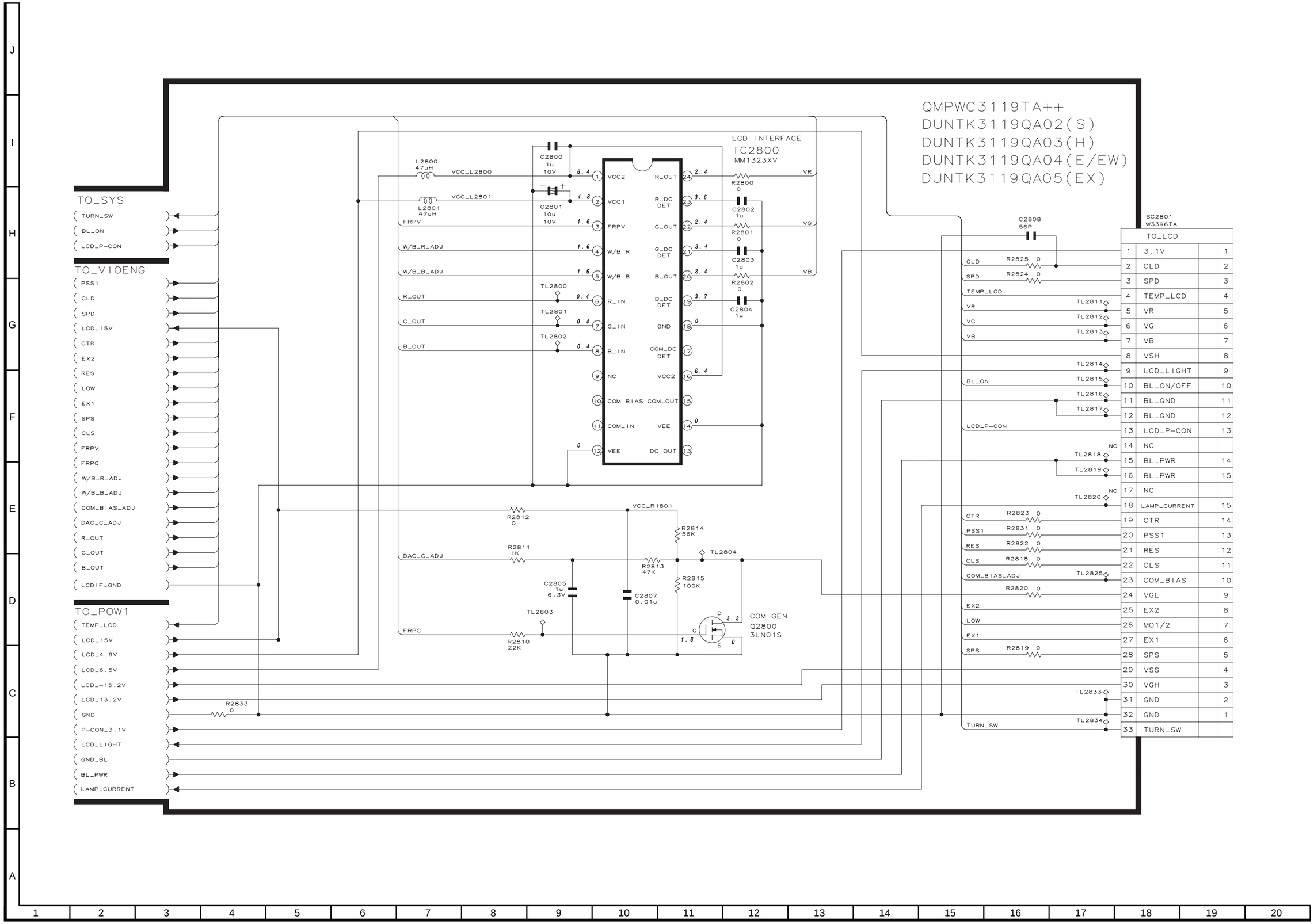
14-10. POWER1 SCHEMATIC DIAGRAM



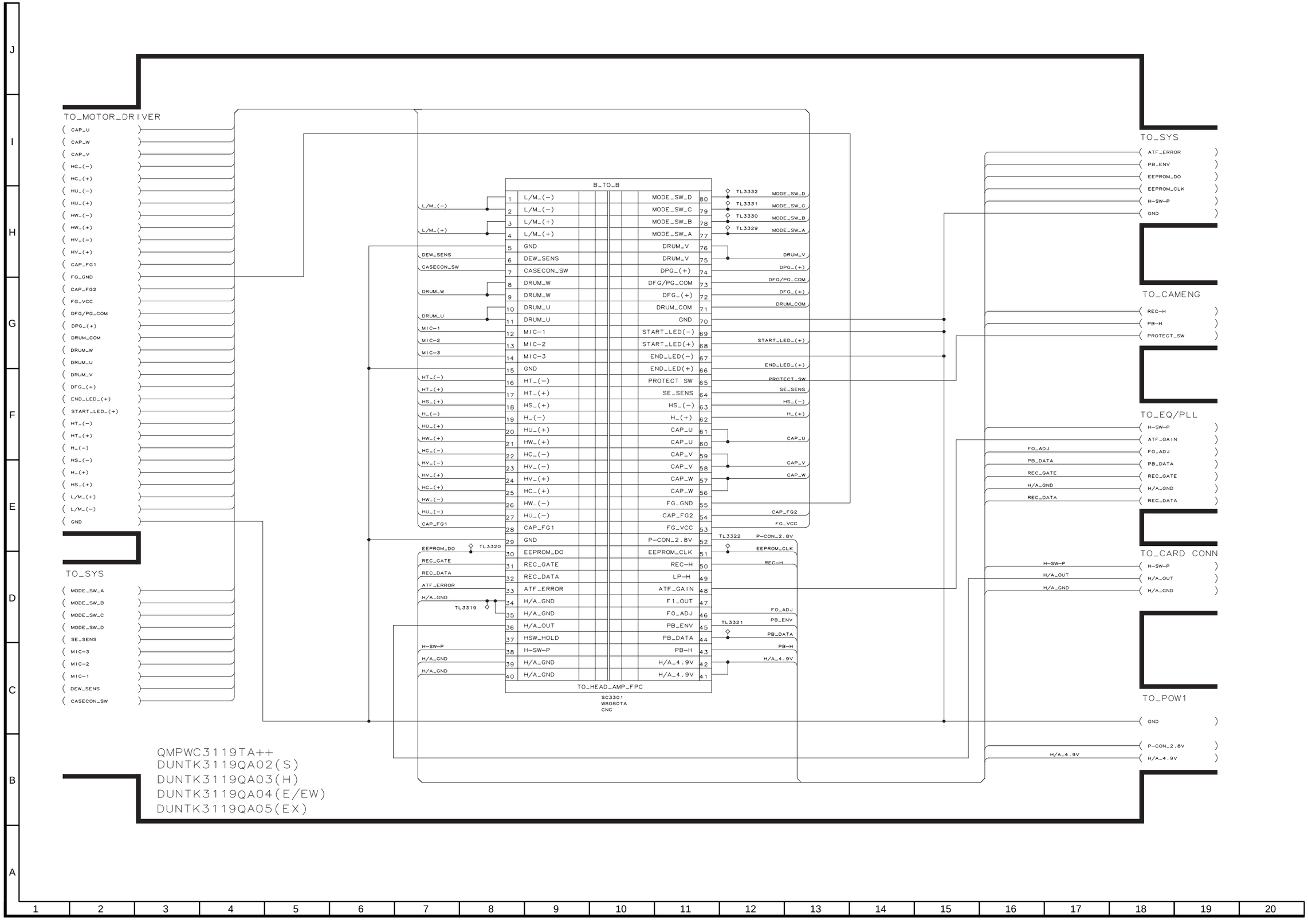
14-11. LENS DRIVER SCHEMATIC DIAGRAM



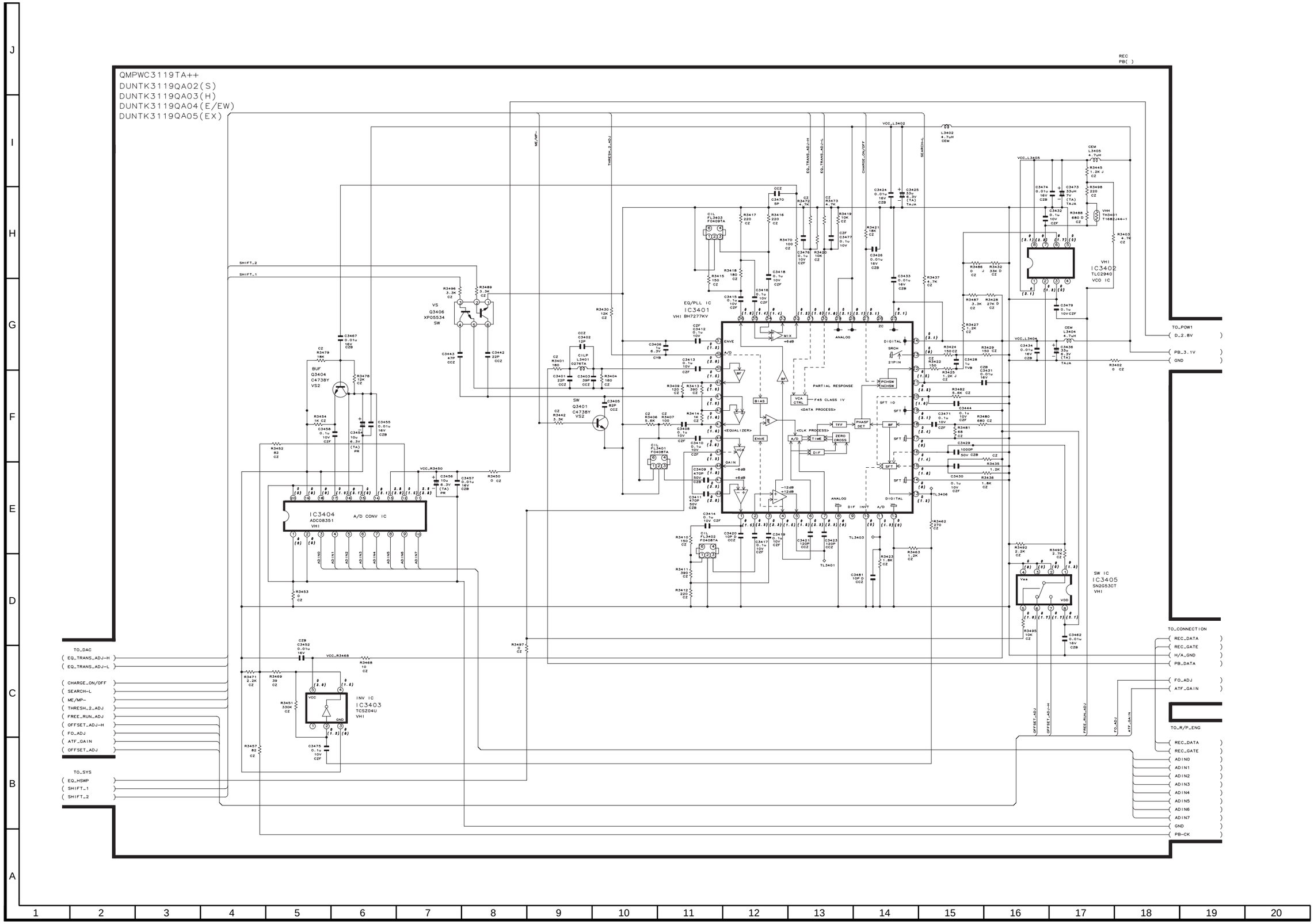
14-12. LCD IF SCHEMATIC DIAGRAM



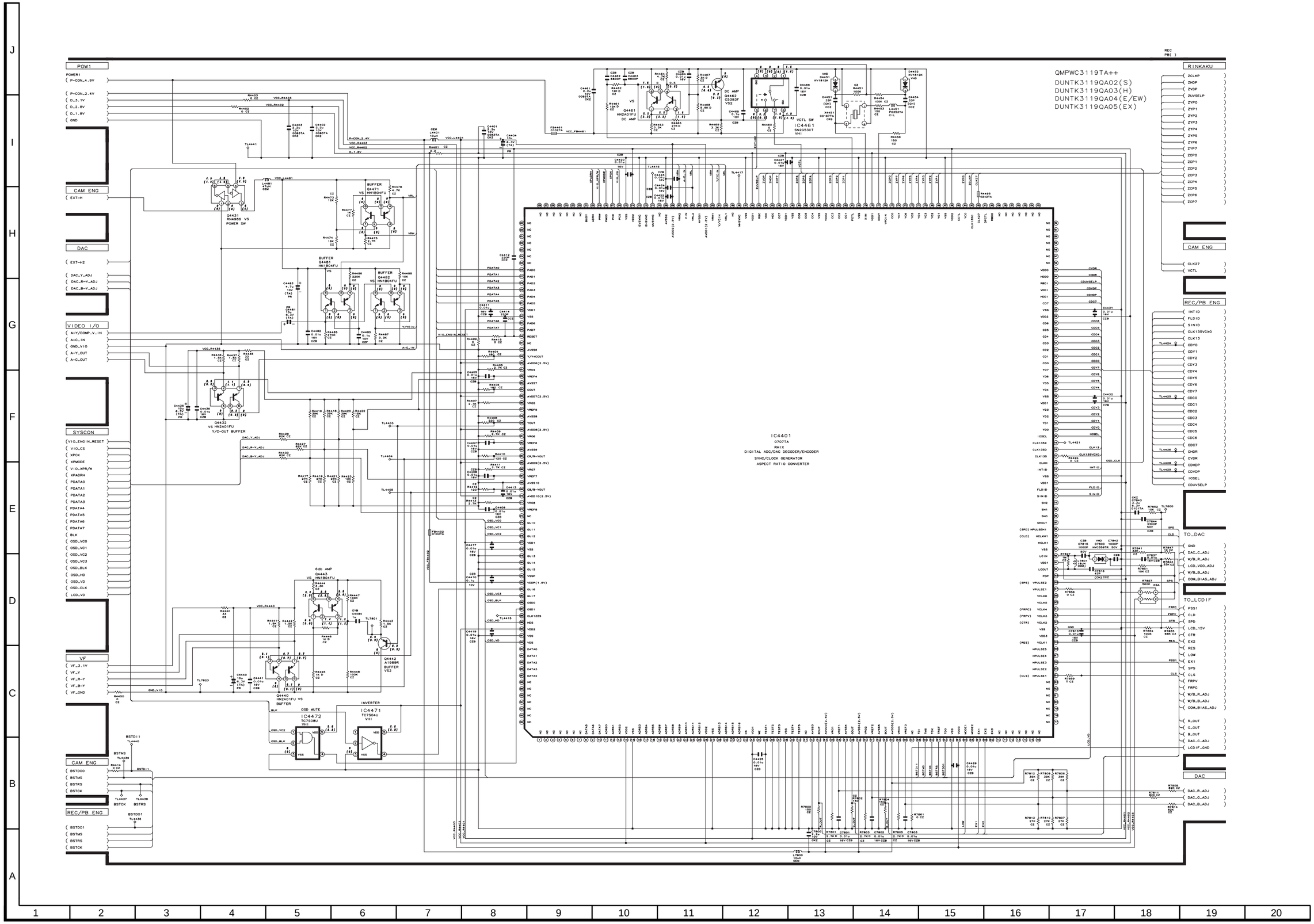
14-13. CONNECTION(B-B) SCHEMATIC DIAGRAM



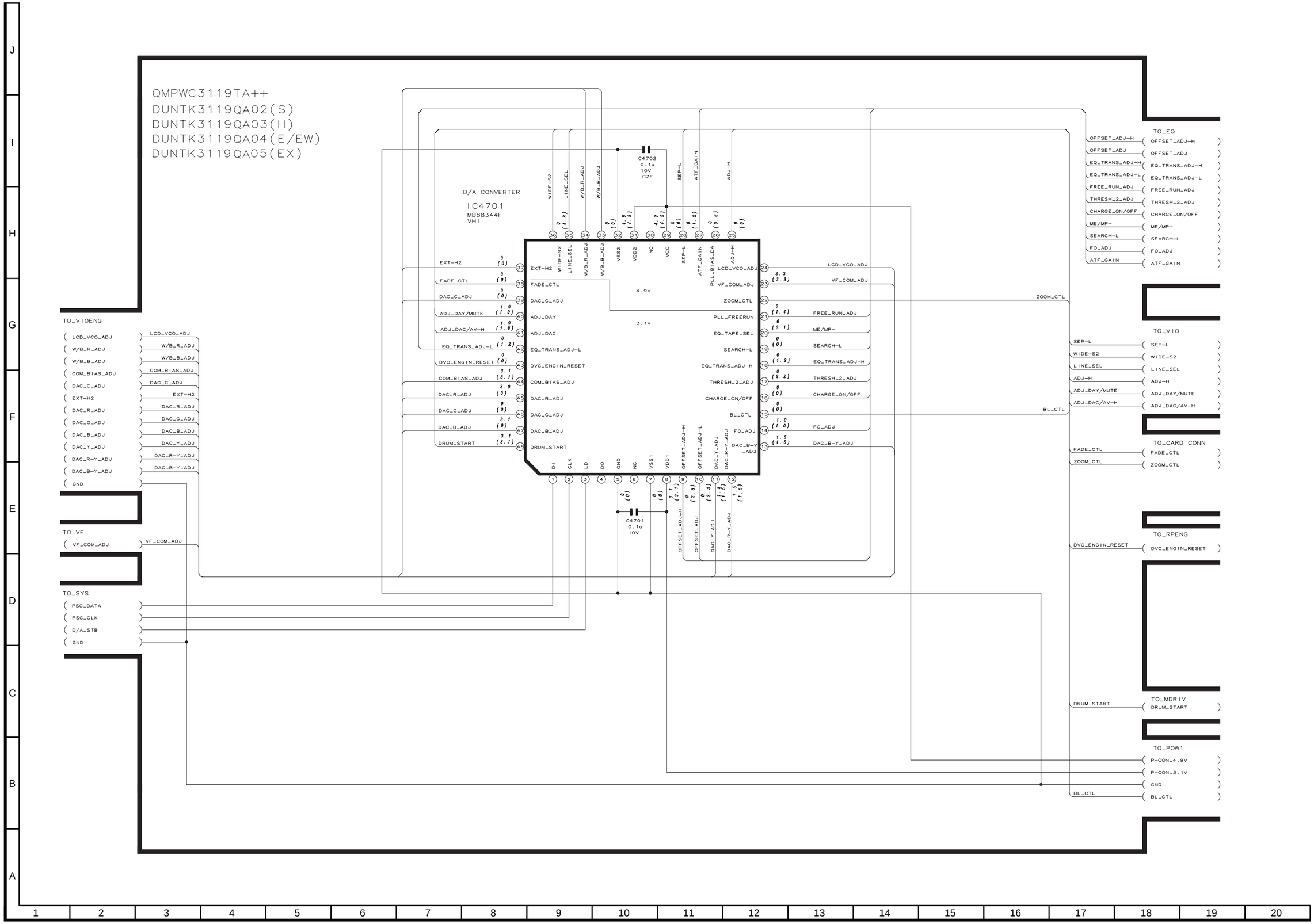
14-14. EQ/PLL SCHEMATIC DIAGRAM



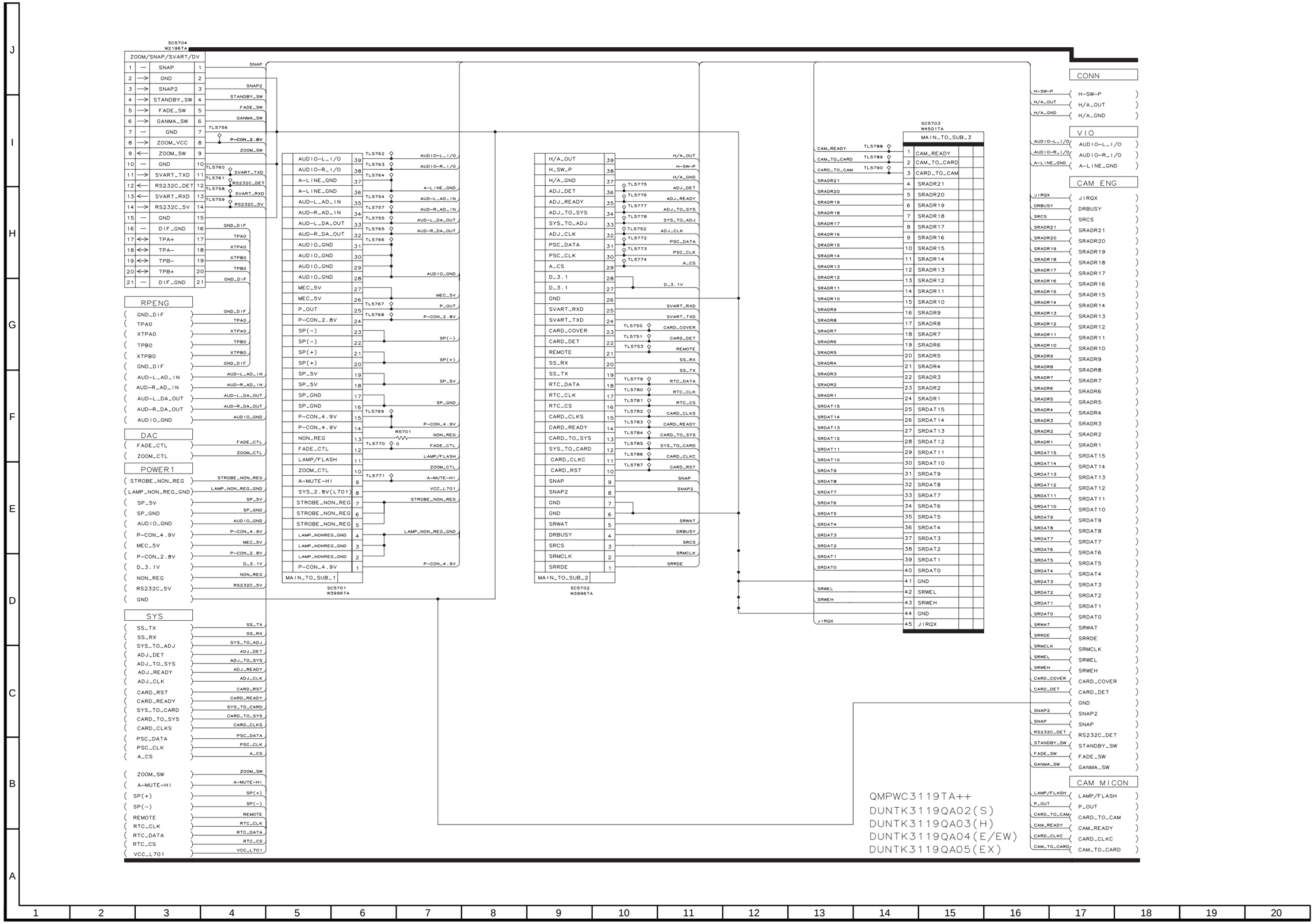
14-15. VIDEO I/O ENGINE SCHEMATIC DIAGRAM



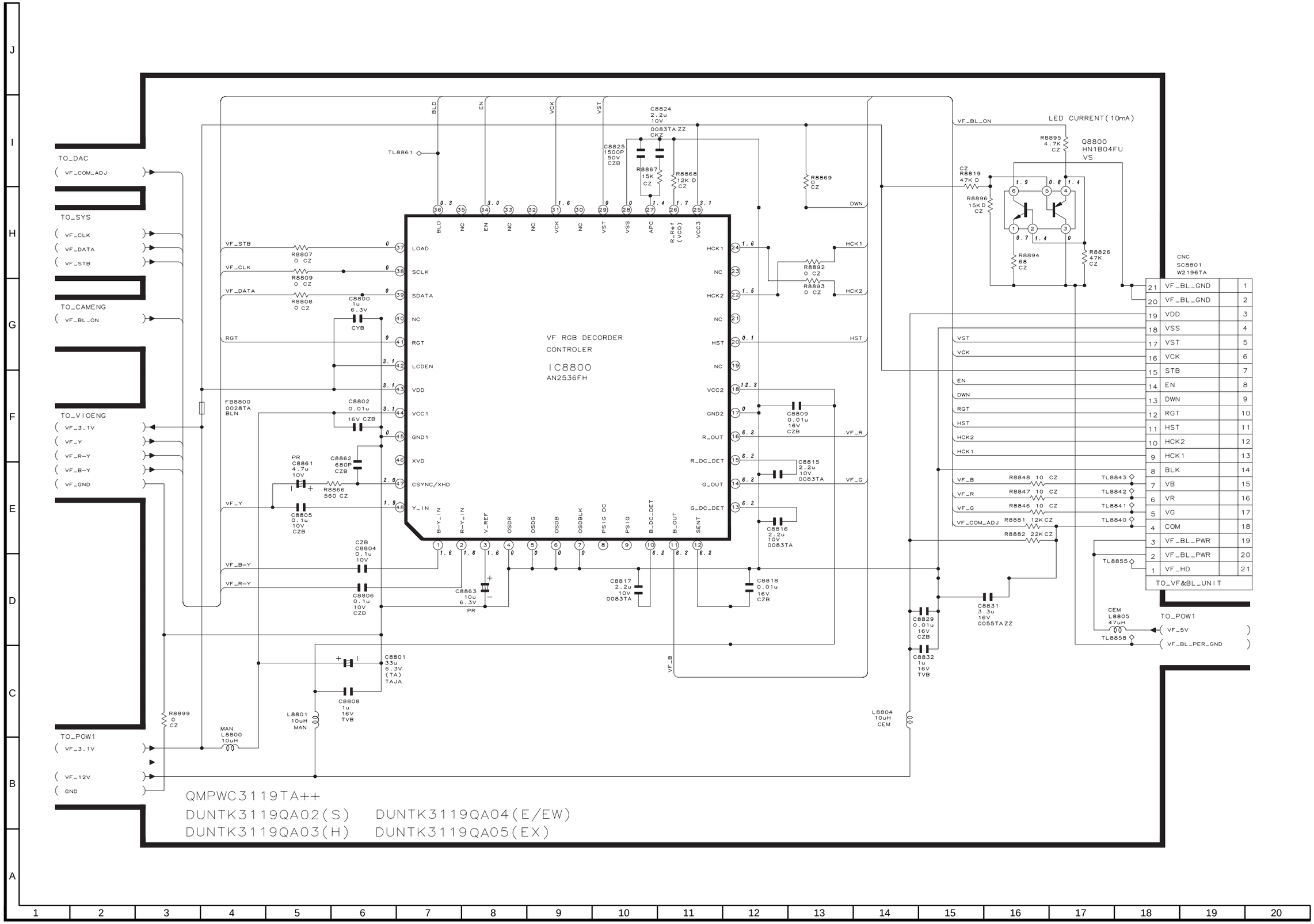
14-16. DAC SCHEMATIC DIAGRAM



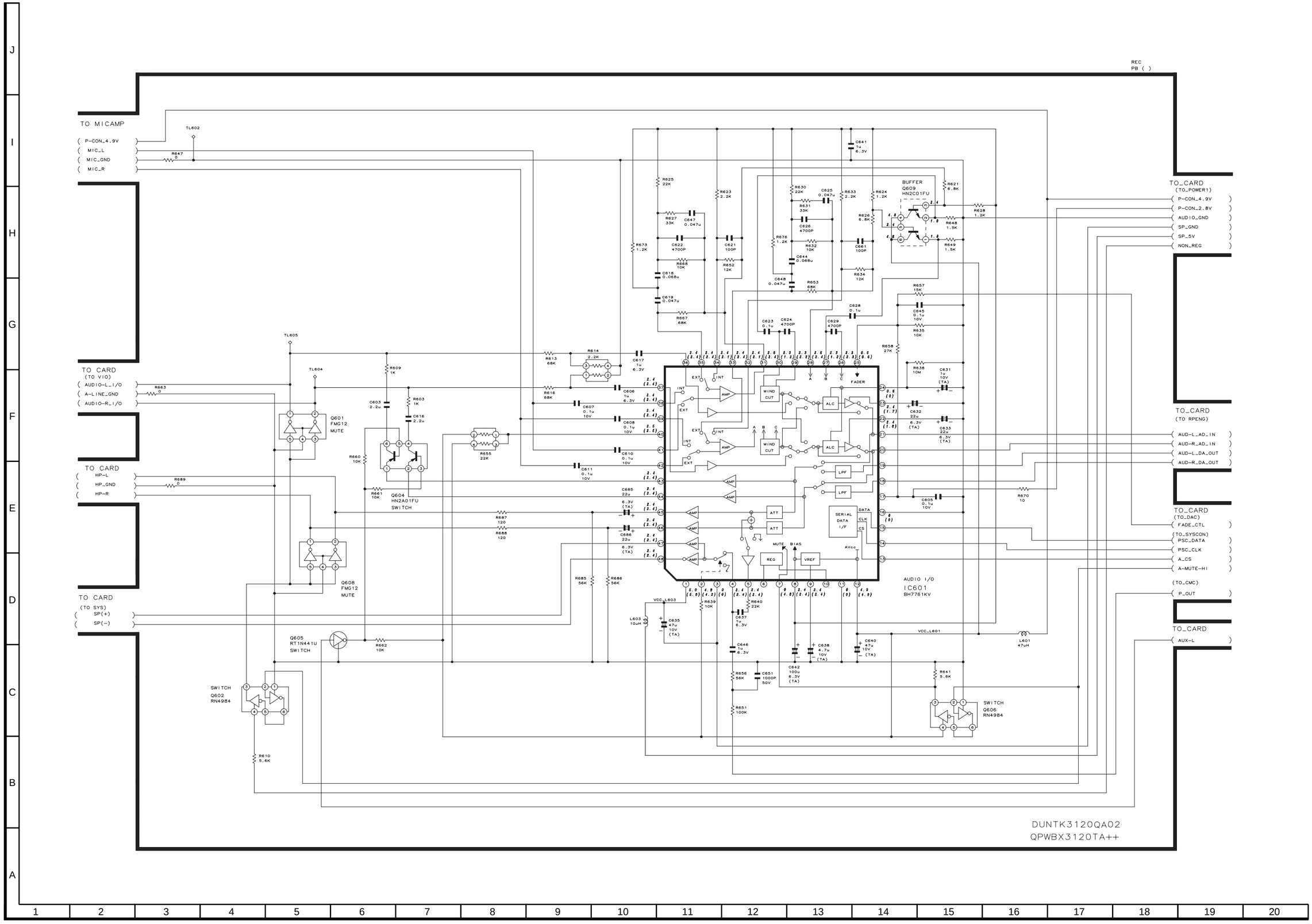
14-17. CARD CONN SCHEMATIC DIAGRAM



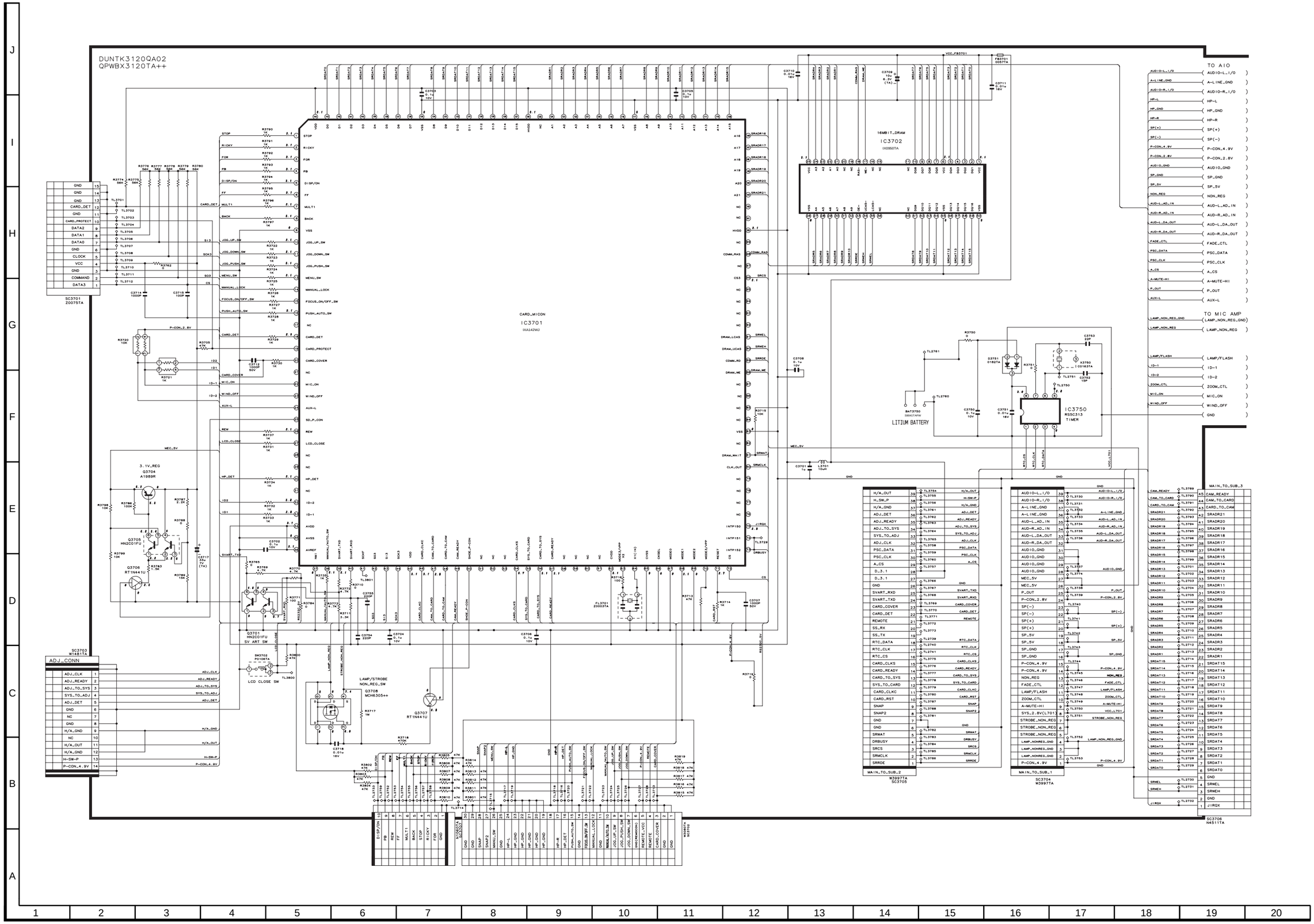
14-18. V/F SCHEMATIC DIAGRAM



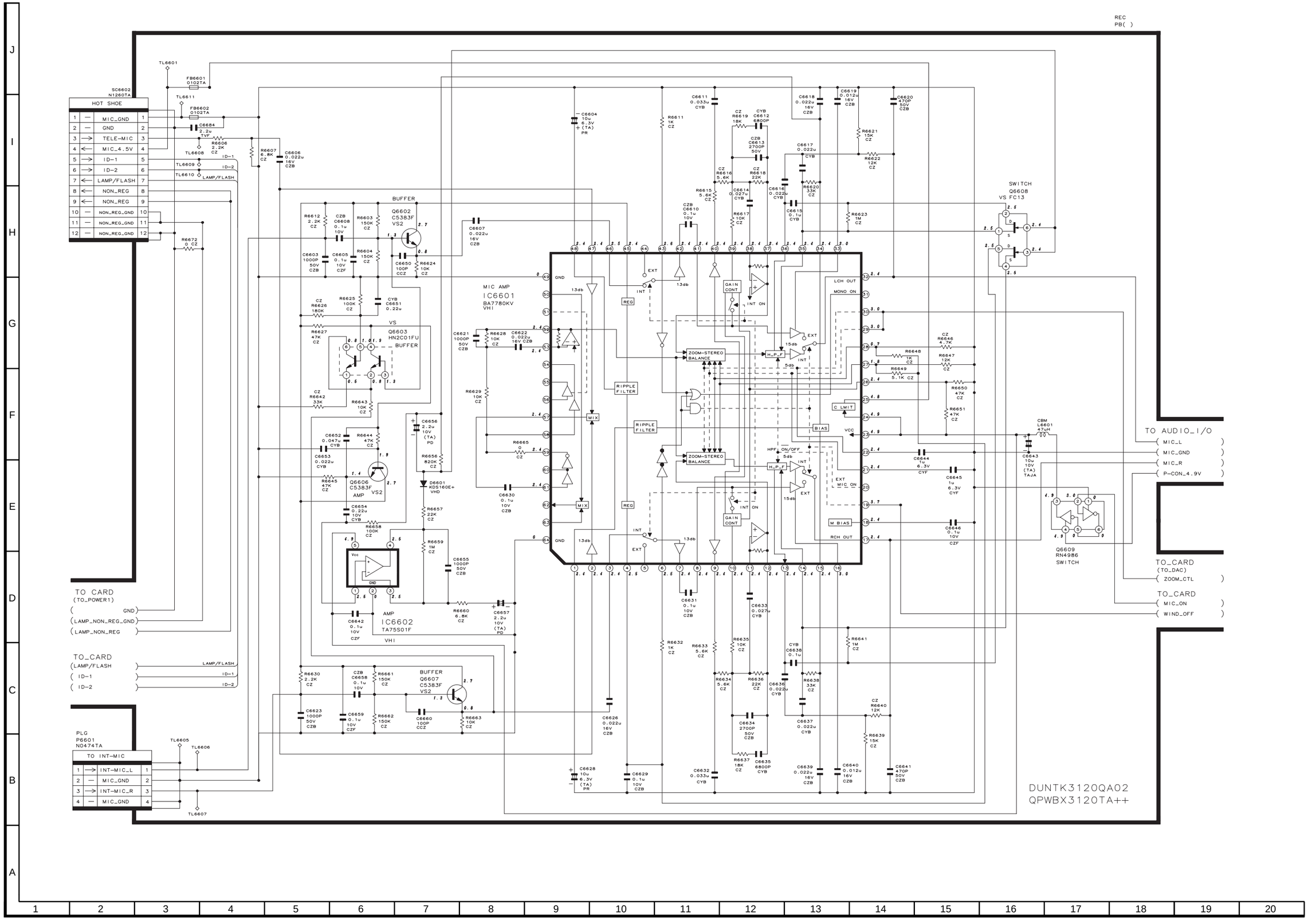
14-19. AUDIO I/O SCHEMATIC DIAGRAM



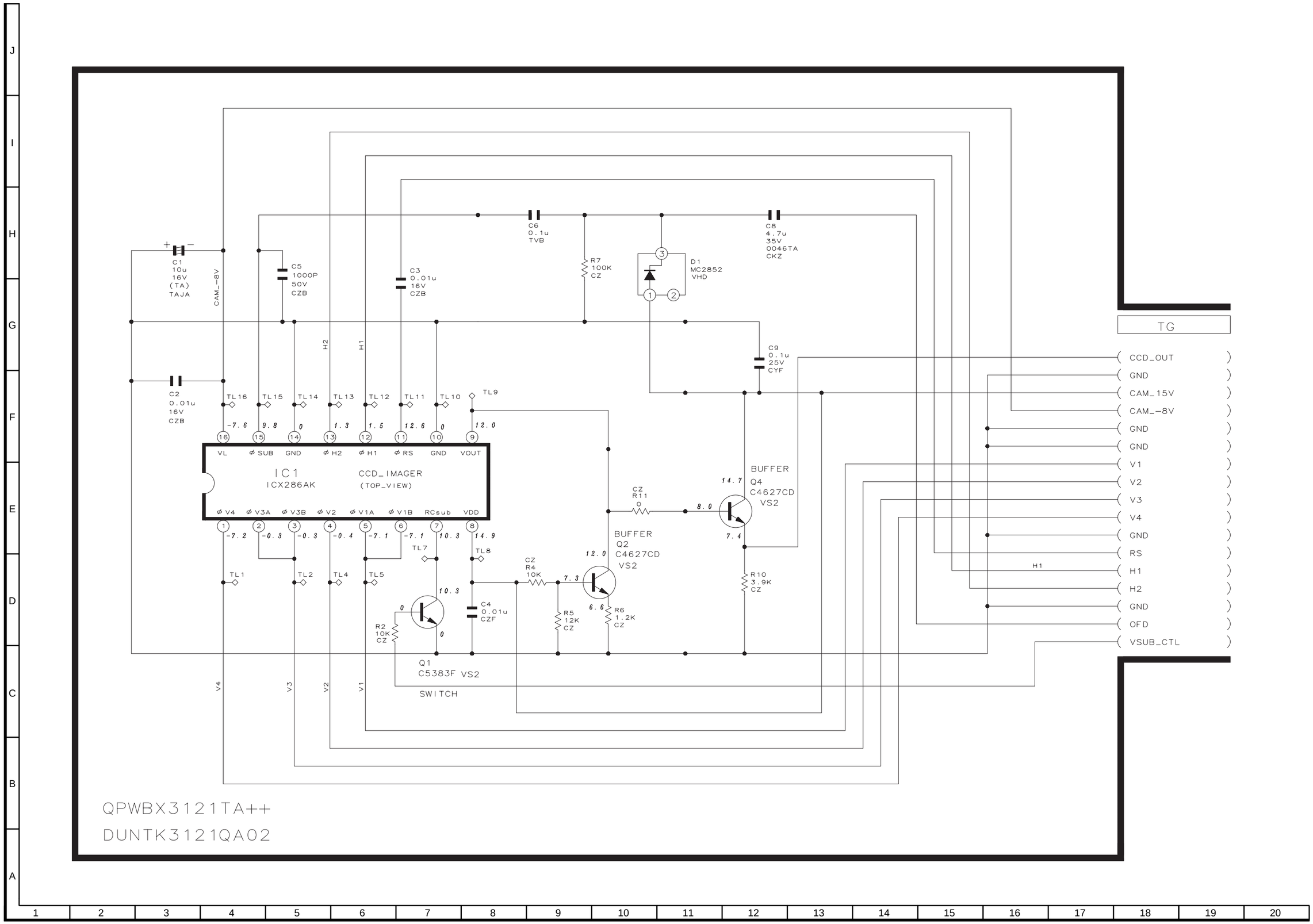
14-20. CARD MICON SCHEMATIC DIAGRAM



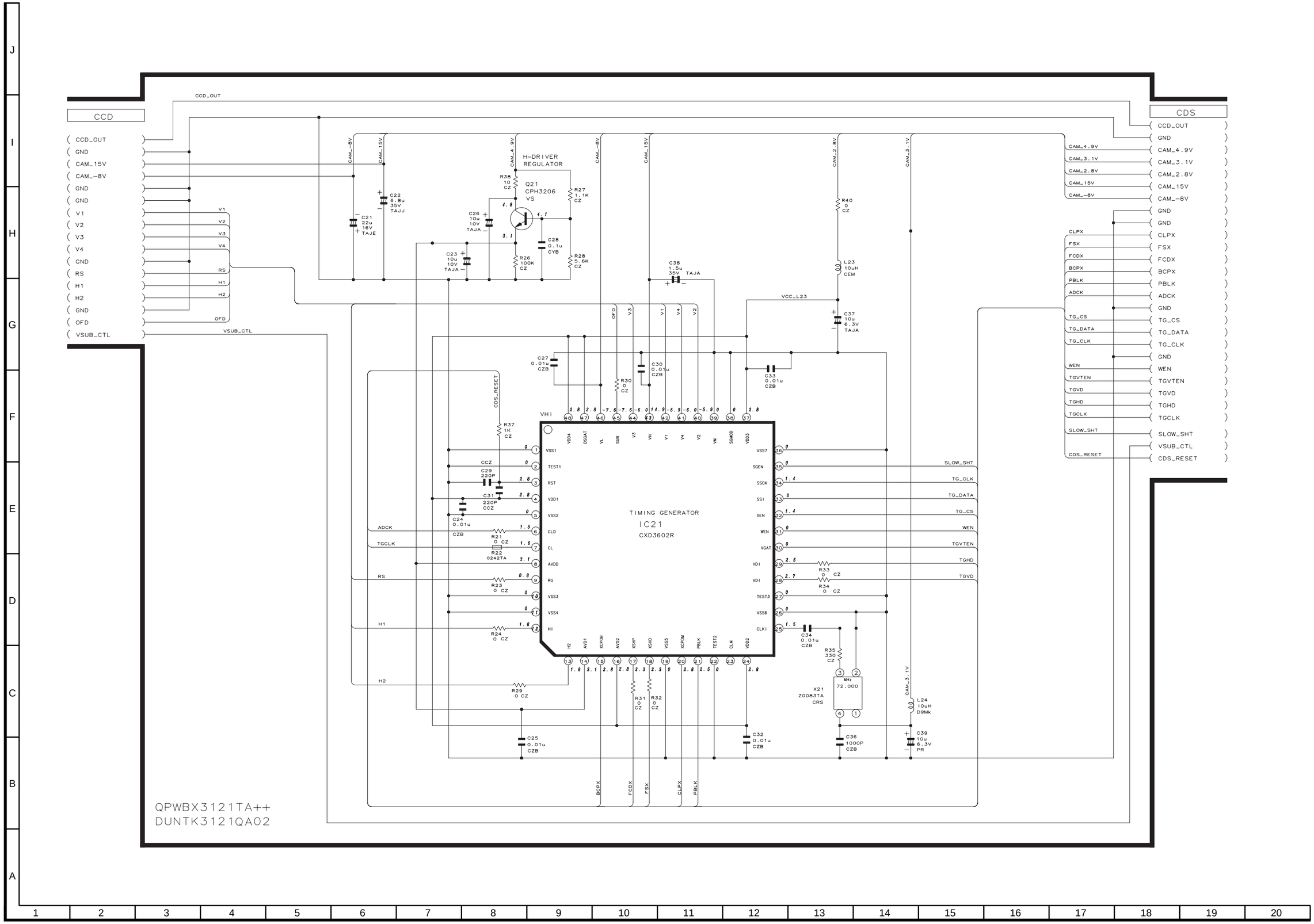
14-21. MIC AMP SCHEMATIC DIAGRAM



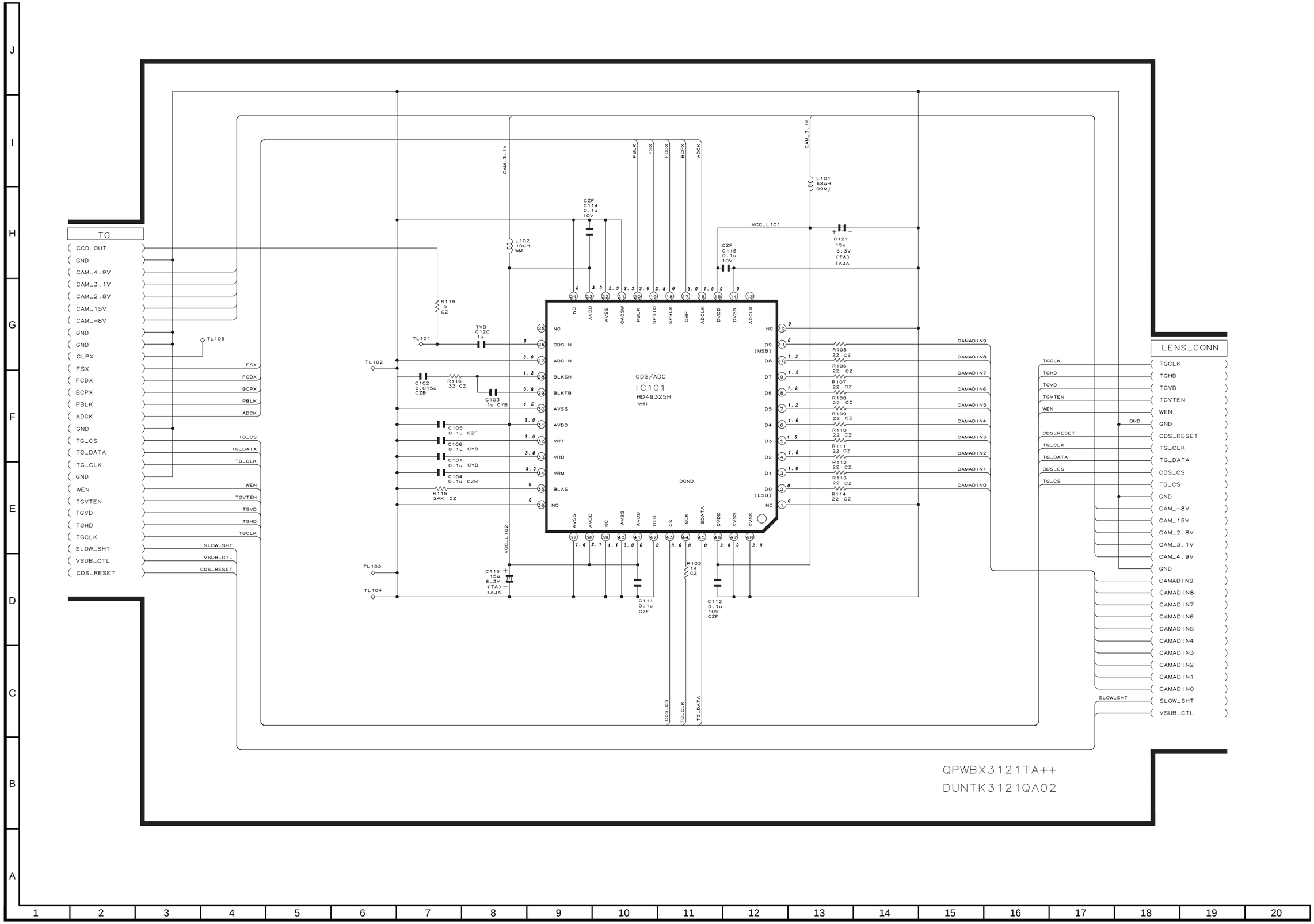
14-22. CCD SCHEMATIC DIAGRAM



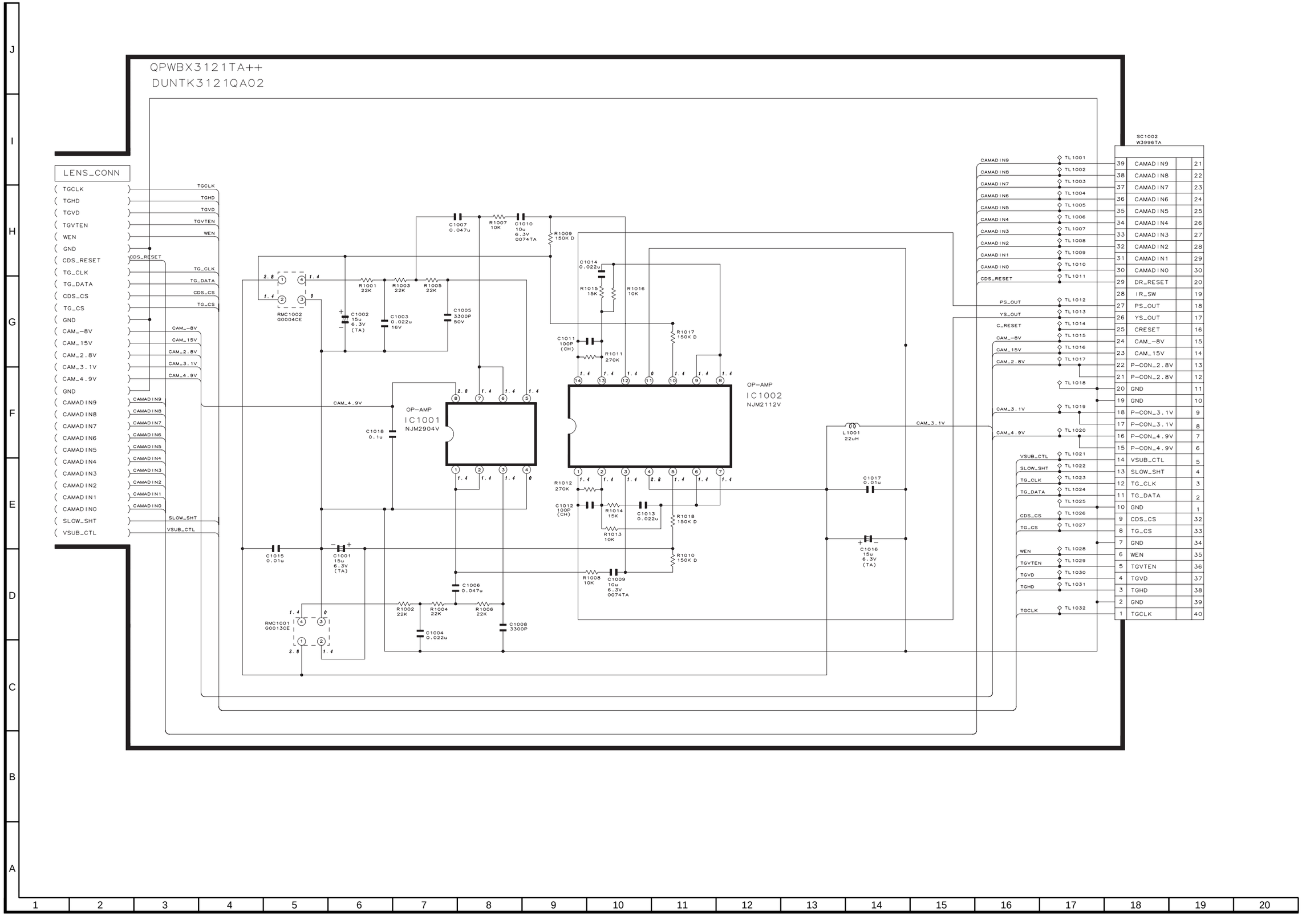
14-23. TG SCHEMATIC DIAGRAM



14-24. CDS SCHEMATIC DIAGRAM

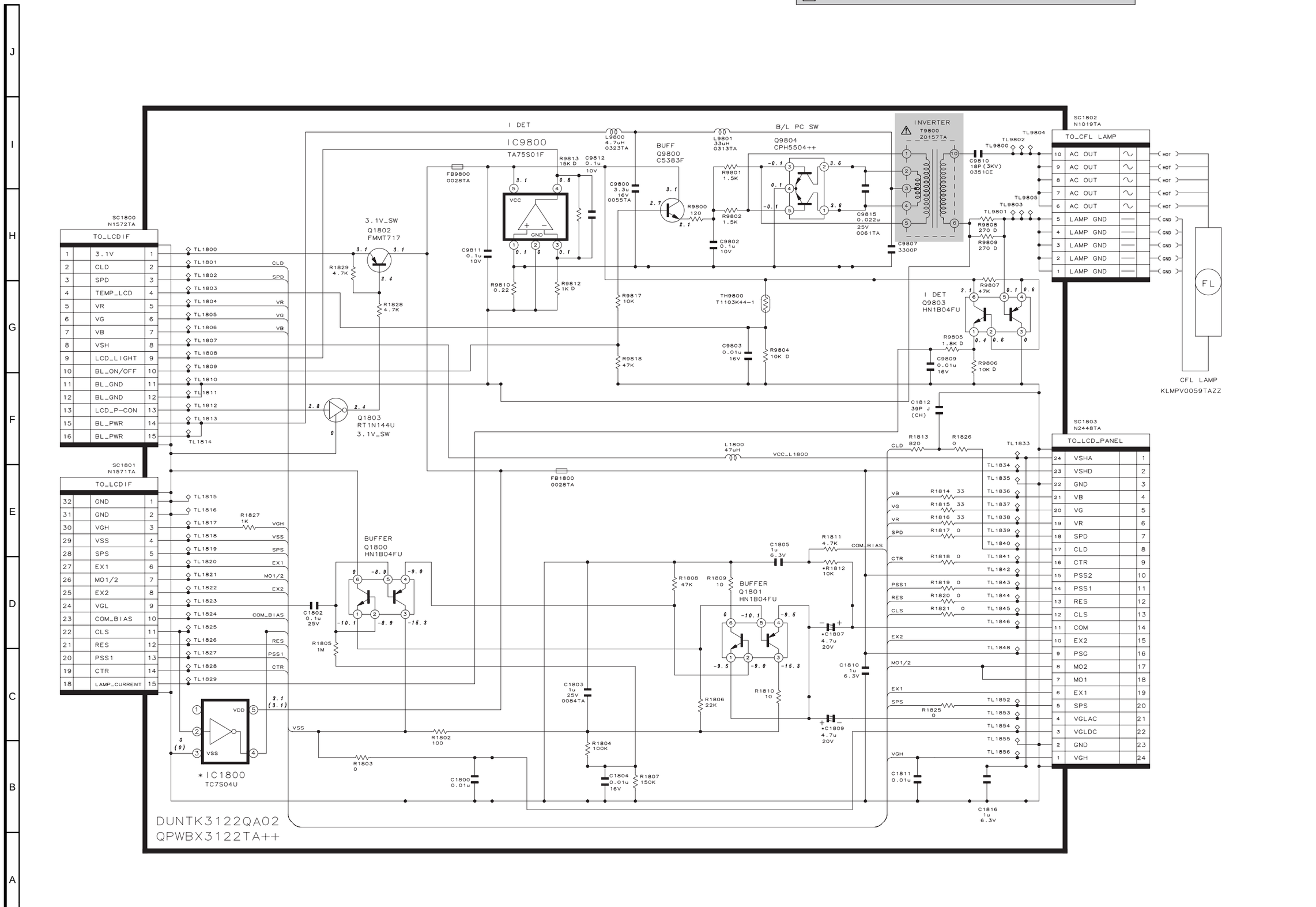


14-25. LCONN SCHEMATIC DIAGRAM

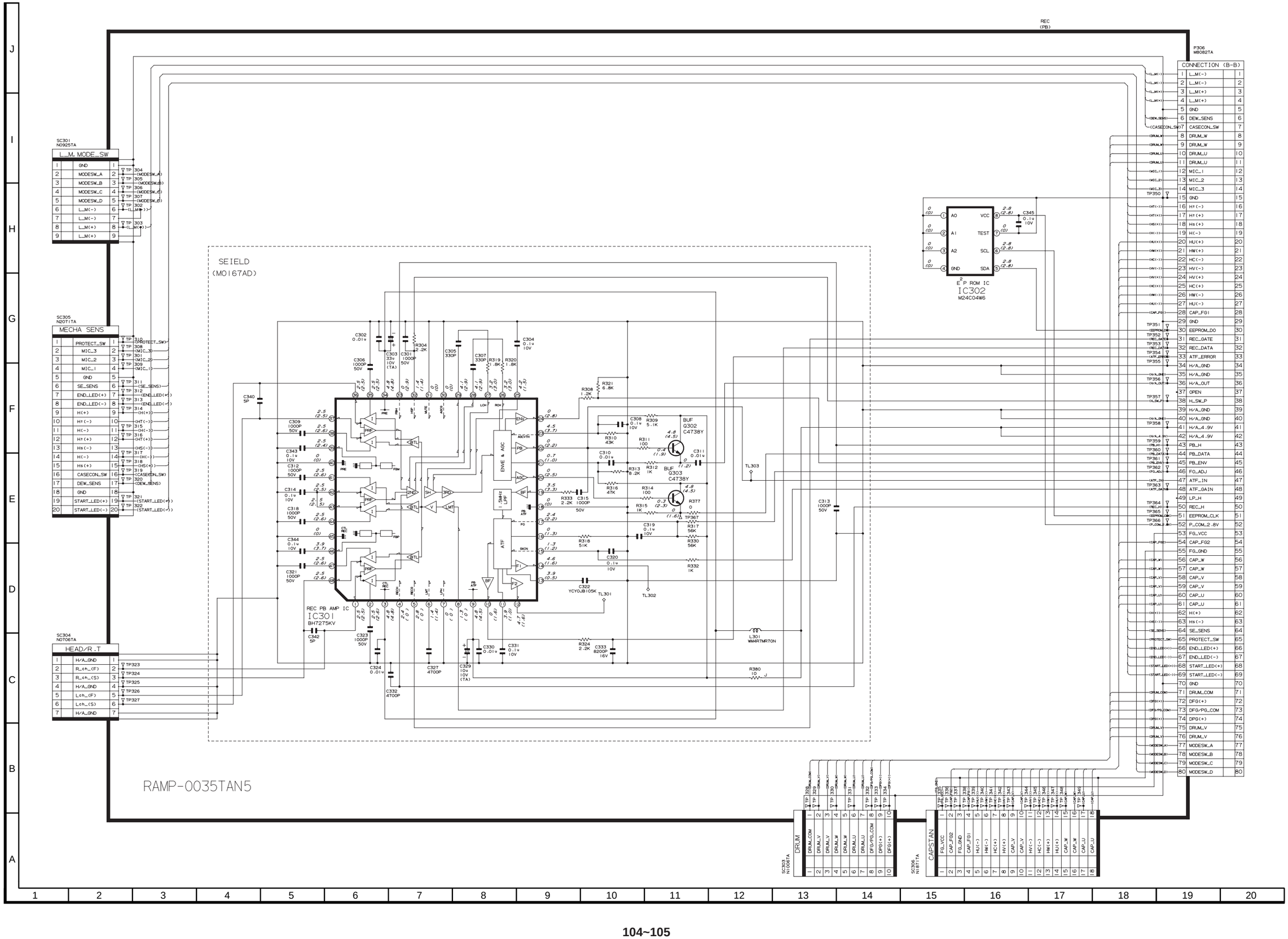


14-26. LCD SCHEMATIC DIAGRAM

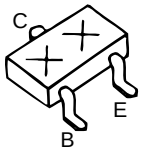
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



14-27. HEAD AMP SCHEMATIC DIAGRAM



14. SEMICONDUCTOR LEAD IDENTIFICATION



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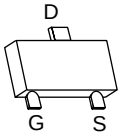
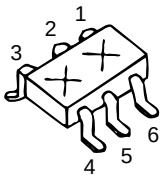
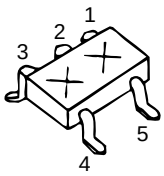
2SC4738Y
FMMT717
2SC5383F
2SA1588Y
RT1N441U
2SC4627CD
UN9214
CPH3109
CPH3206



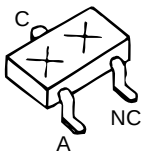
NDS355AN
3LN01S



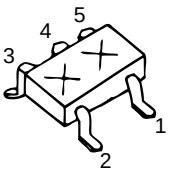
HN2A01FU
HN1B04FU
HN2C01FU
RN4990
XP05534
FC117
RN4984
RN4986



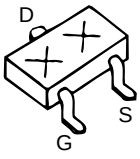
RN1704
2SC4944Y
TA75S01F
TC7S08U
TC7S04U
TCSZ04U



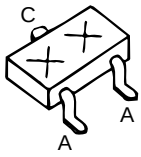
MC2852



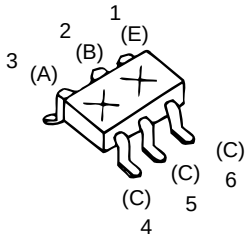
FMG12



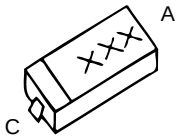
NDS332P



MA132WK

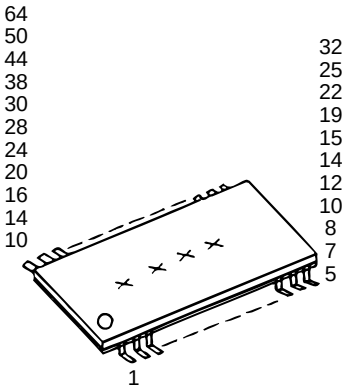


CPH6702



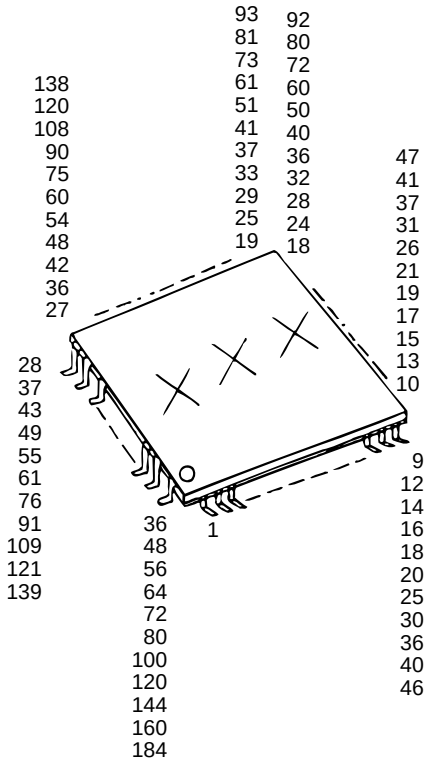
HVU359TR
EX1394CE
HVC359TR

KV1812K
HVU362



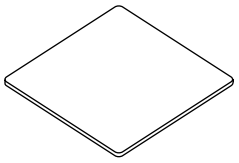
LV4051AT
NJM2538B
NJM2904V
NJM2902V

MB8346BV
LV4051AT
ADC08351

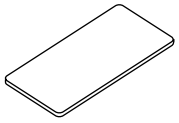


BH7277KV
BH7275KV
MB3881

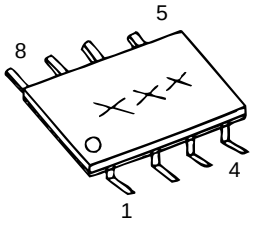
MB88344F
LB11990W



IX0707TA
IX0809TA
IX0785TA

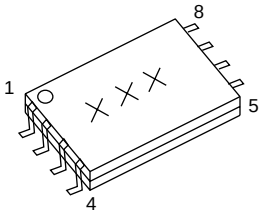


IXA166WJ



NJM2143R
TLC2940

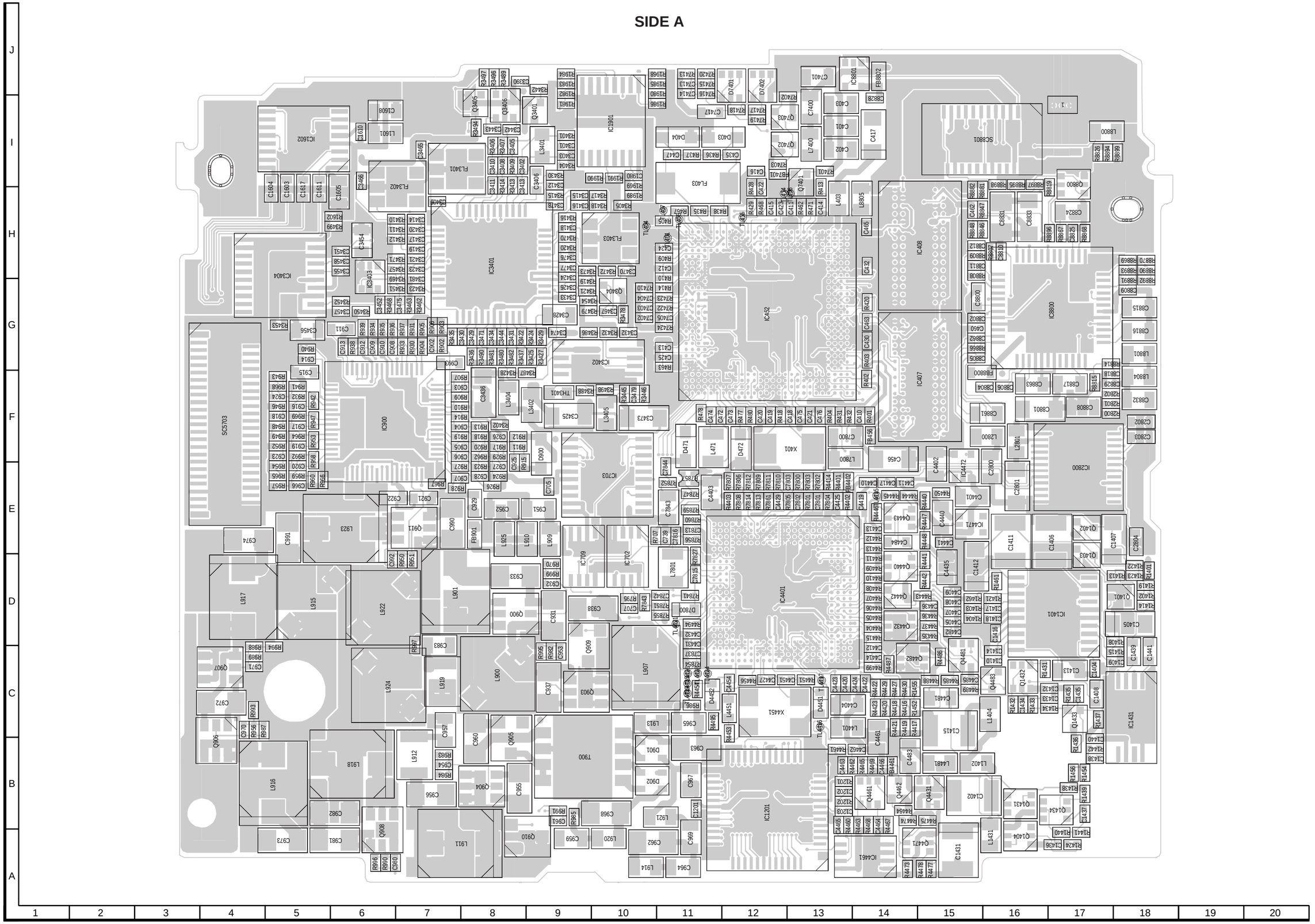
M24C04W6
NJM2143R



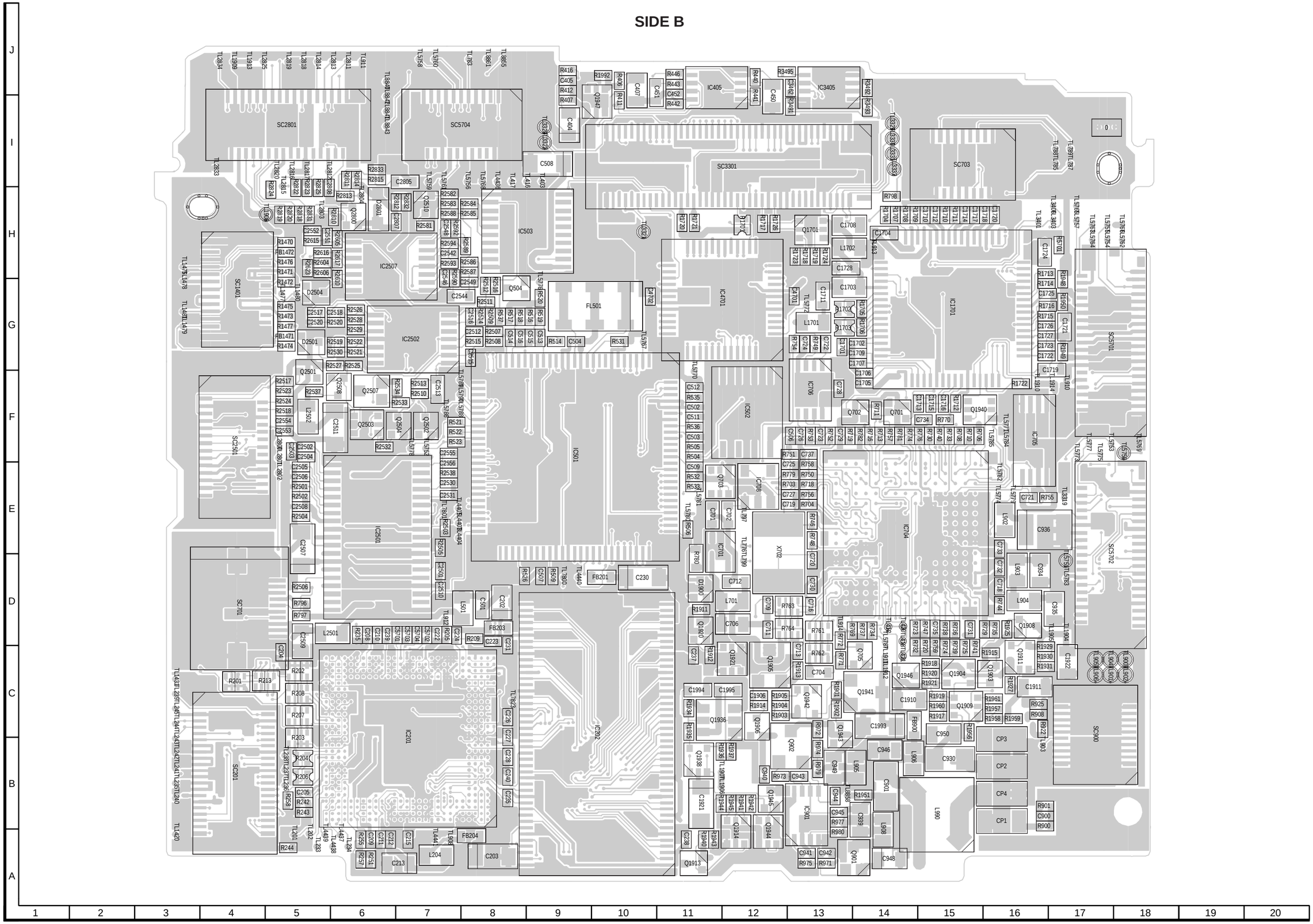
NJM2535V
SN2G53CT
NJU7015R

16. PRINTED WIRING BOARD ASSEMBLIES MAIN PWB

SIDE A



SIDE B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SC5704
SC3301
SC703
SC1401
SC2501
SC701
SC201
SC5701
SC5702
SC900
IC2507
IC2502
IC2501
IC503
IC4701
IC1701
IC706
IC705
IC704
IC502
IC501
IC708
IC701
IC202
IC201
IC901
IC405
IC3405
FL501
Q504
Q2501
Q2507
Q2503
Q1701
Q1940
Q702
Q701
Q703
Q1936
Q1938
Q1921
Q1913
Q1945
Q1914
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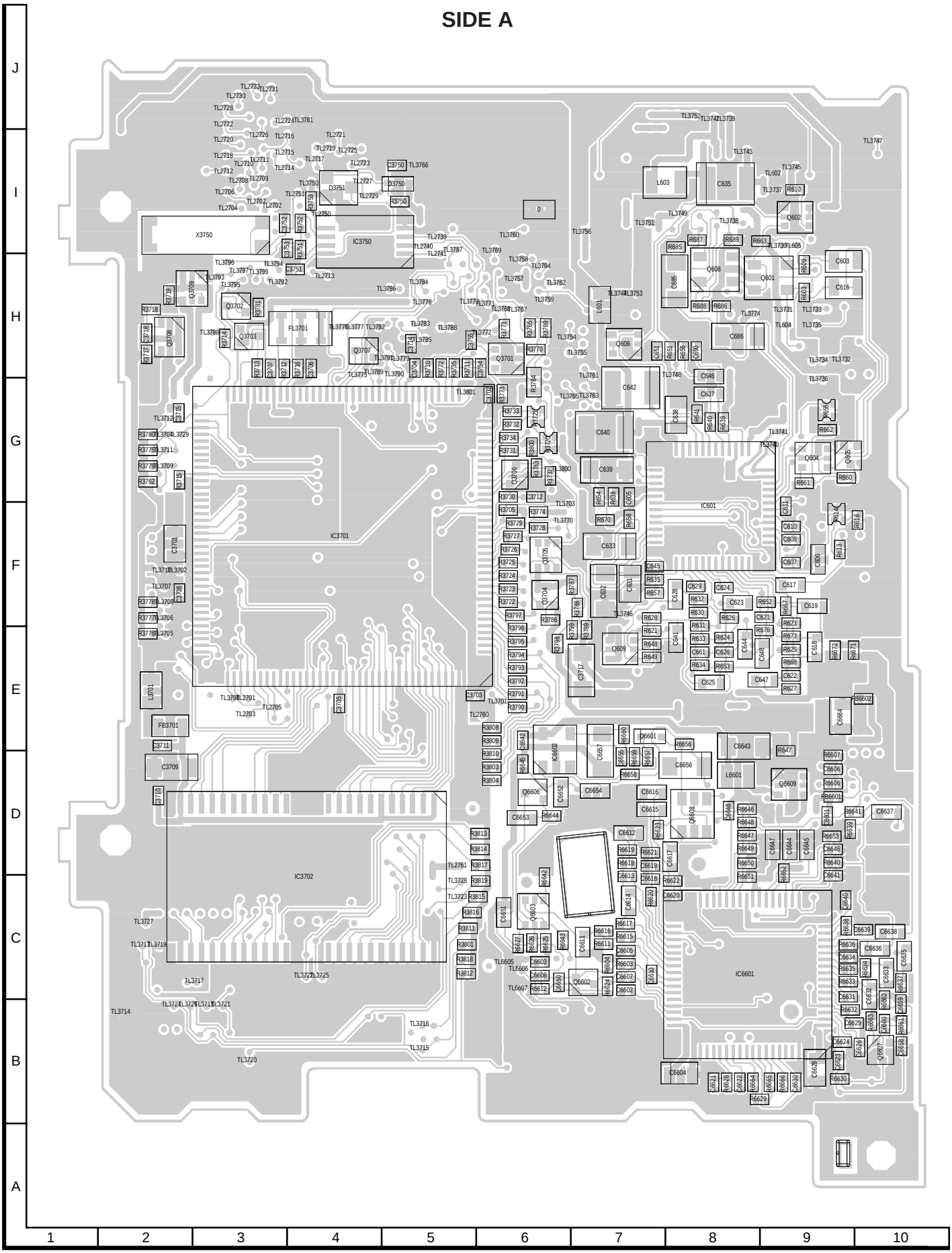
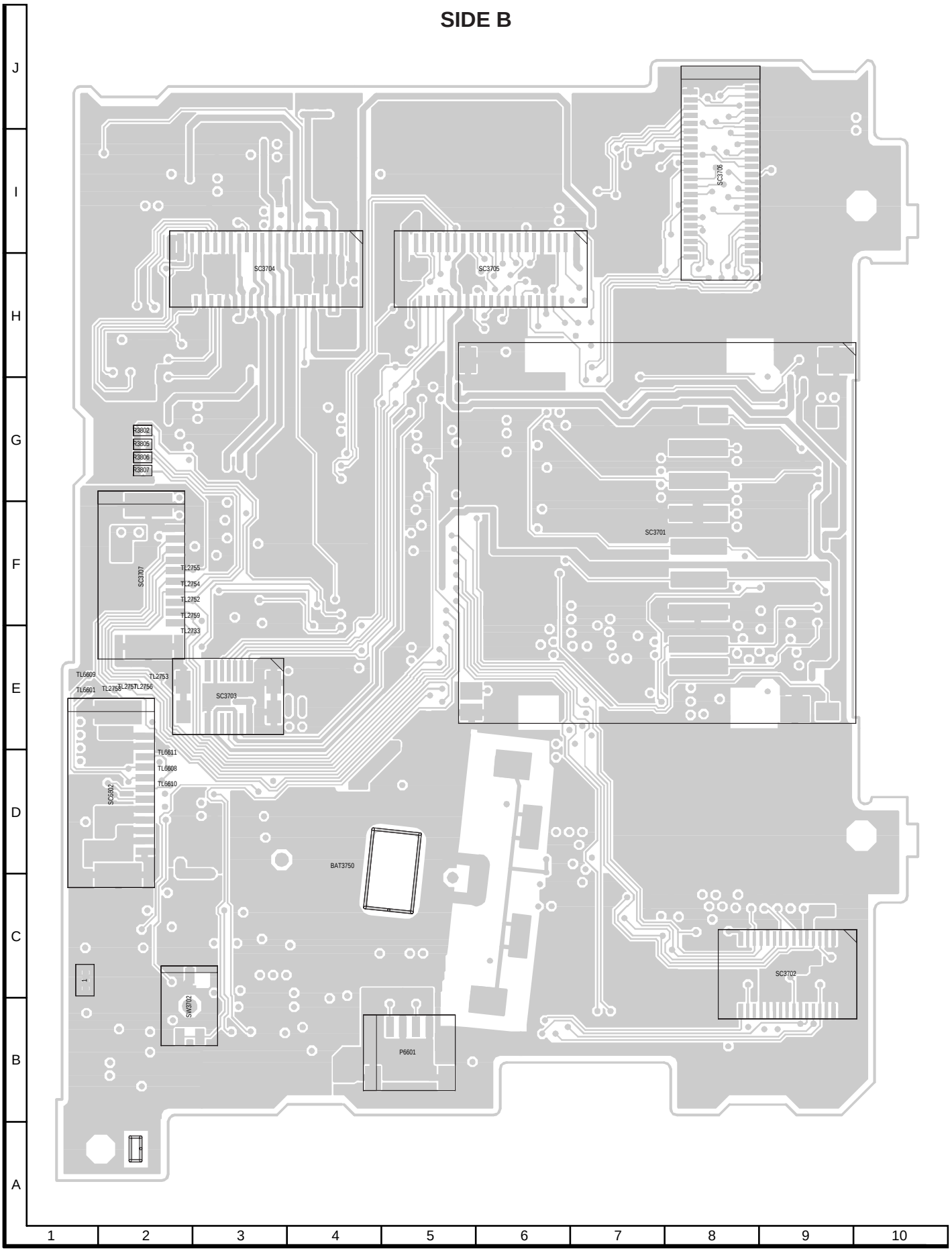
Q1913
Q1921
Q1936
Q1938
Q1907
Q1906
Q902
Q1905
Q1908
Q1909
Q1910
Q1911

SUB PWB

SIDE A



SIDE B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SC3705
SC3706
R3802
R3805
R3806
R3807
SC3707
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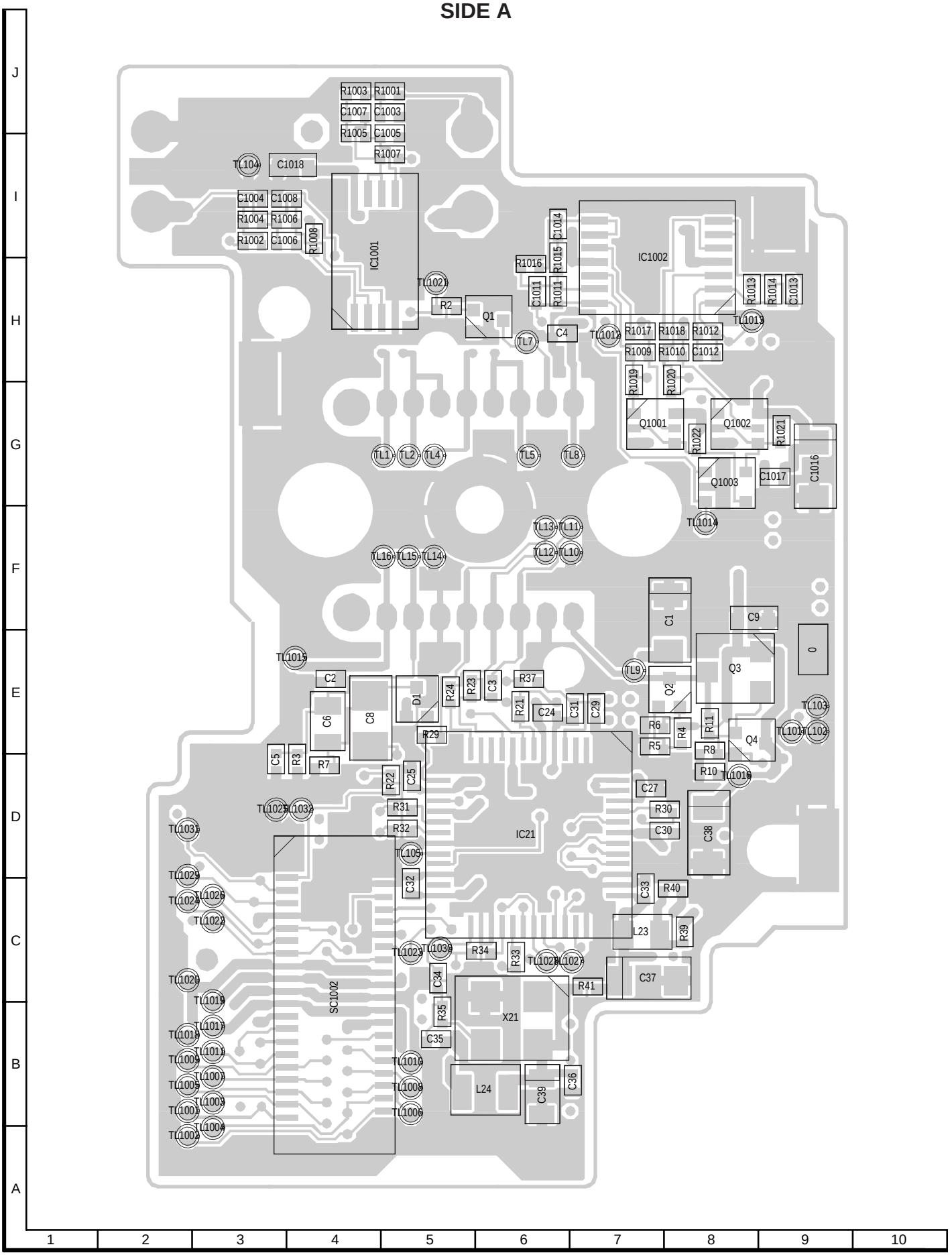
TL2752
TL2759
TL2733
TL6609
TL6601
TL2753
TL2757
TL2756
SC3703
SC3701
TL6611
TL6608
TL6610
SC6602
BAT3750
SC3702
SW3702
P6601

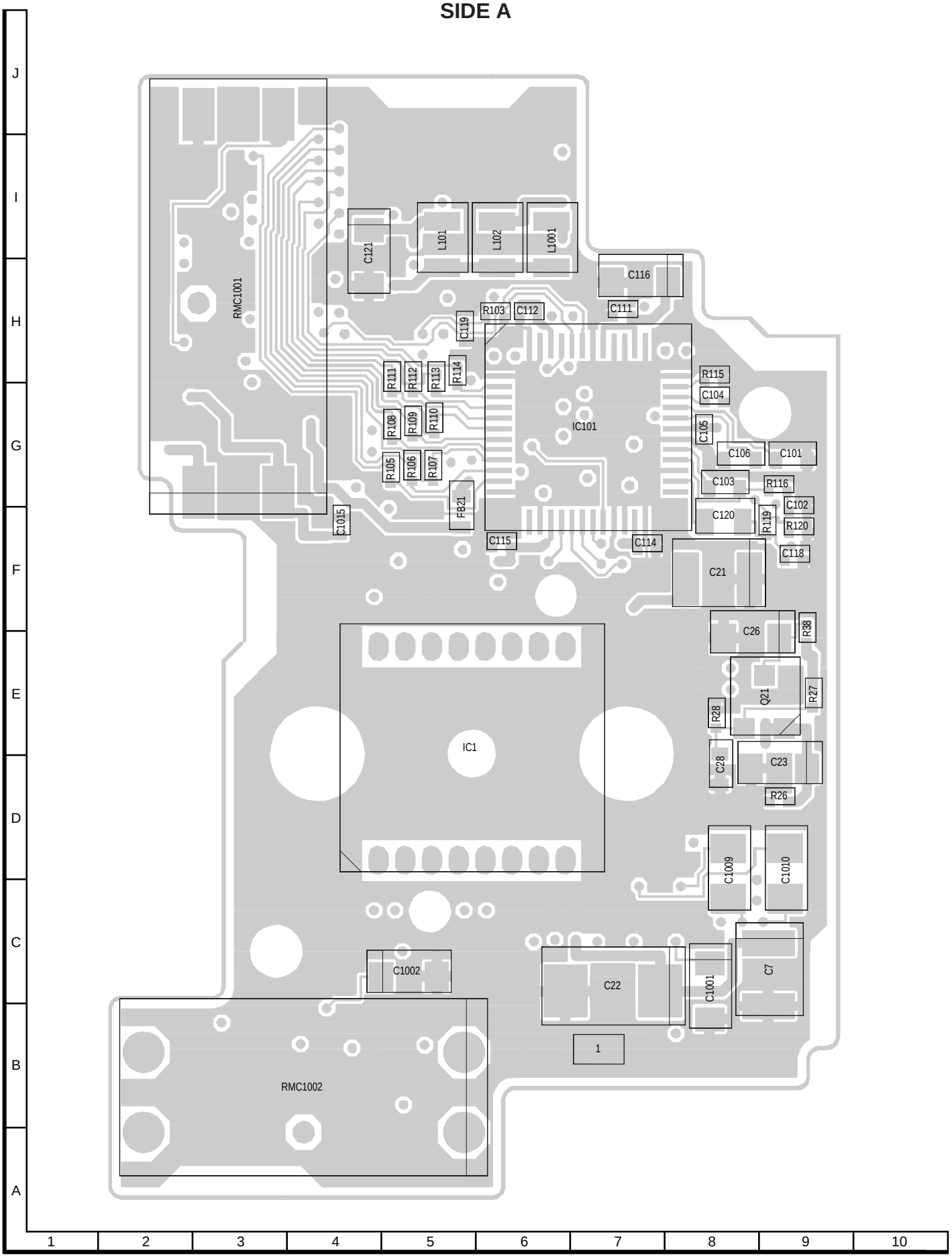
CAMERA PWB

SIDE A



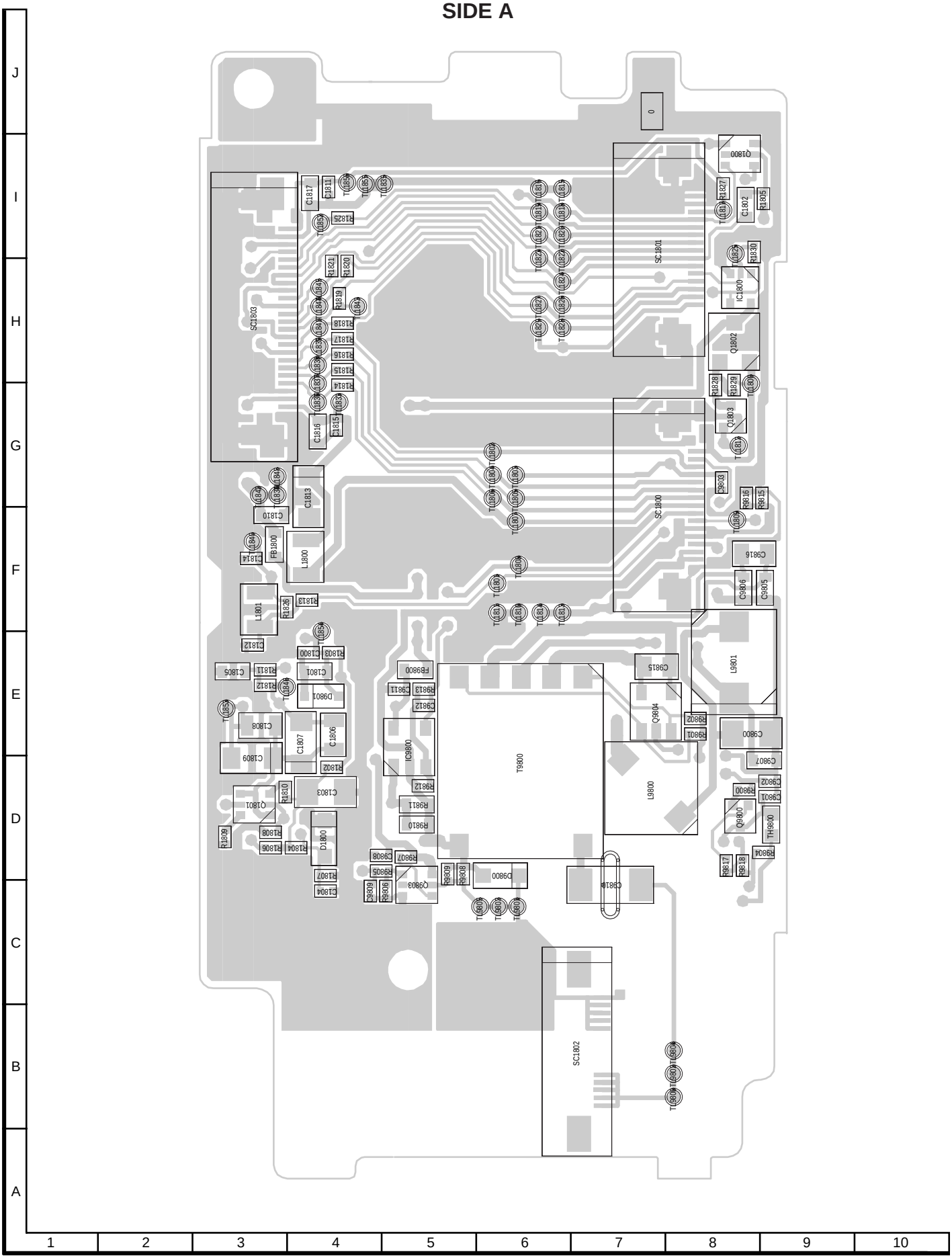
CCD PWB

SIDE A



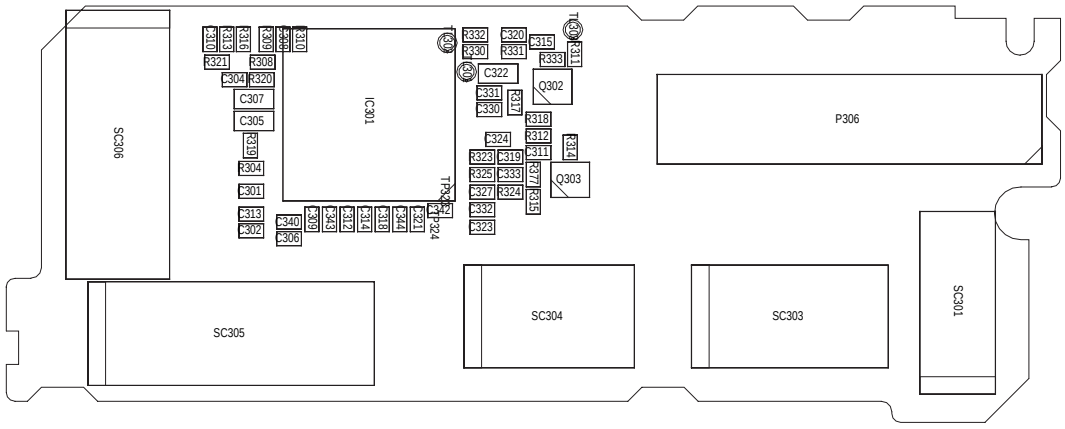
LCD PWB

SIDE A

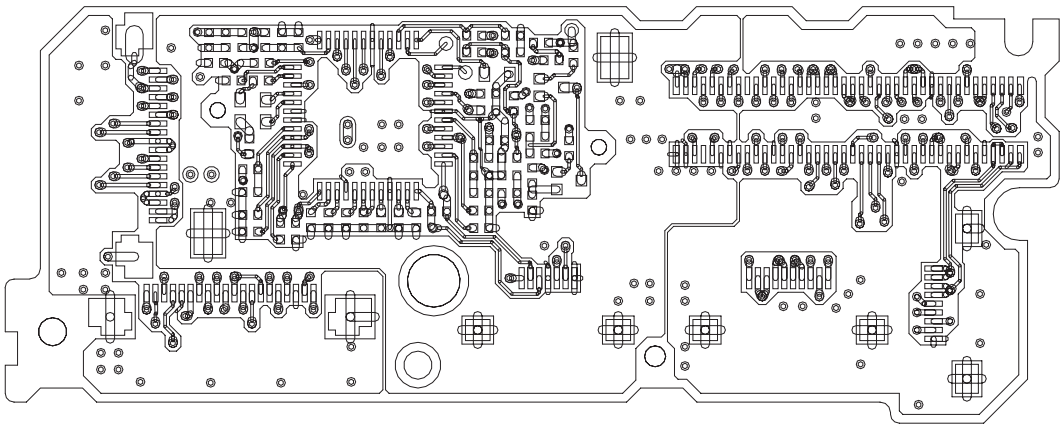


HEAD AMP PWB

Component Side SIDE A



Wiring Side SIDE A



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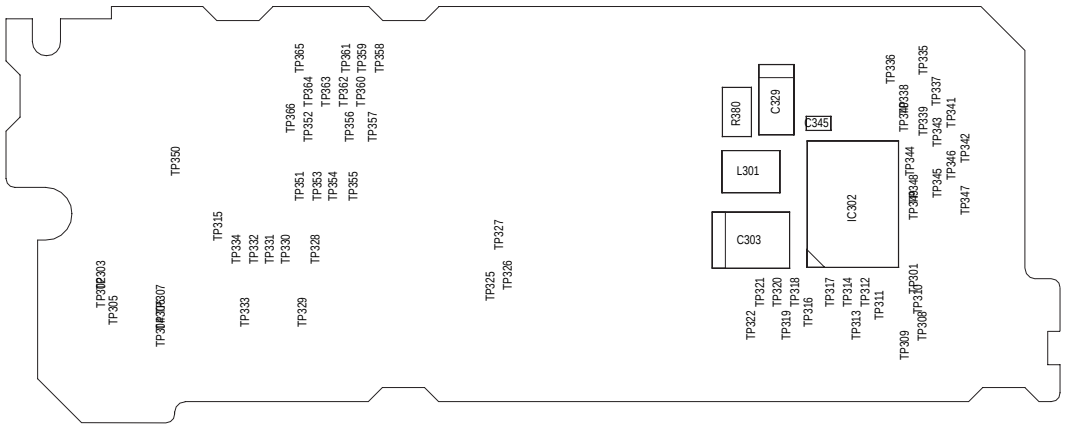
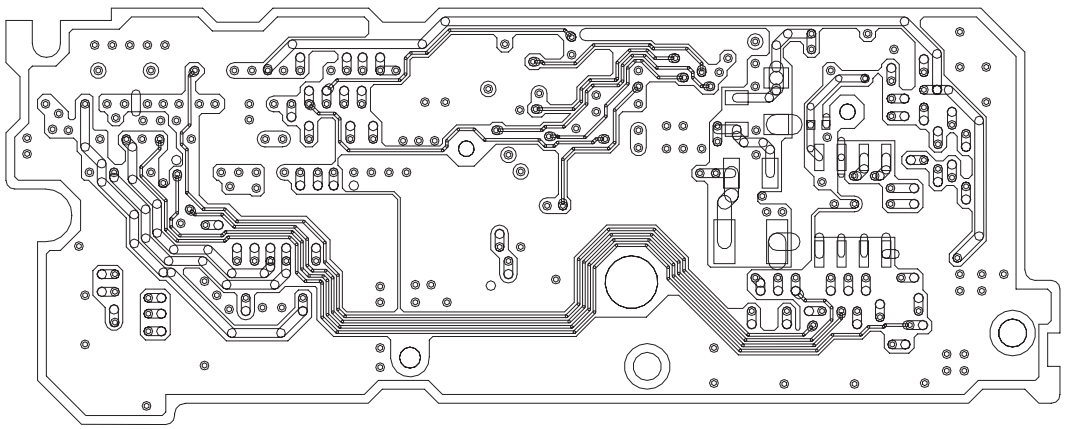
Component Side SIDE B



Wiring Side SIDE B



1 2 3 4 5 6 7 8 9 10

16. REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER **2. REF. NO.**
3. PART NO. **4. DESCRIPTION**
5. PRICE CODE

⚠ **MARK: SAFETY RELATED PARTS**

PWB ASSEMBLY IS NOT REPLACEMENT ITEM

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES *(NOT REPLACEMENT ITEM)*

	DUNTK3119QA02	MAIN PWB Unit(VL-AX1S)	—
	DUNTK3119QA03	MAIN PWB Unit(VL-AX1H)	—
	DUNTK3119QA04	MAIN PWB Unit (VL-AX1E/EW)	—
	DUNTK3119QA05	MAIN PWB Unit (VL-AX1EX)	—
	DUNTK3120QA02	SUB PWB Unit	—
	DUNTK3121QA02	CAMERA PWB Unit	—
	DUNTK3122QA02	LCD PWB Unit	—
	RAMP-0035TAN5	Head Amp PWB Unit	—

Ref. No.	Part No.	★	Description	Code

DUNTK3119QA02(VL-AX1S) DUNTK3119QA03(VL-AX1H) DUNTK3119QA04(VL-AX1E/EW) DUNTK3119QA05(VL-AX1EX) MAIN PWB UNIT

INTEGRATED CIRCUITS

⚠	CP1	VHiCCP2B25/-1	CCP2B25	AD
⚠	CP2	VHiCCP2B25/-1	CCP2B25	AD
⚠	CP3	VHiCCP2B25/-1	CCP2B25	AD
⚠	CP4	VHiCCP2B25/-1	CCP2B25	AD
	IC201	RH-iX0785TAZZ	IX0785TA, CAMENG	BL
	IC202	RH-iX0832TAZZ	IX0832TA, SDRAM	BF
	IC405	VHiNJU7015R-1Y	NJU7015R, DC Amp	AF
	IC407	RH-iXA166WJZZQ	IXA166WJ, Codec External Memory	AW
	IC408	RH-iXA166WJZZQ	IXA166WJ, ECC External Memory	AW
	IC452	RH-iX0809TAZZ	IX0809TA, Codec/ECC/ PCM/CLK. Gen/Dif	BM
	IC501	RH-iXA157WJZZQ	IXA157WJ, Camera/Lens Micon	AX
	IC502	VHiBR24C32F-1Y	BR24C32F, E²PROM	AH
	IC503	VHiMB8346BV-1	MB8346BV	AN
	IC701	VHiRQ5RW28B-1	RQ5RW28B, Sys 2.8V Regulator	AE
	IC702	VHiSN2G04CT-1	SN2G04CT, Inverter	AE
	IC703	RH-iX0940TAZZY	IX0940TA, Character Generator	AL
	IC704	RH-iXA150WJZZQ	IXA150WJ, Mec/System Micon	AY
	IC705	VHiBR2408FV-1Y	BR2408FV, E²PROM	AF
	IC706	VHiNJM2143R-1	NJM2143R	AE
	IC708	VHiPST3636N-1Y	PST3636N, Reset	AD
	IC709	VHiSN2G53CT-1	SN2G53CT	AE
	IC900	VHiMB3881++-1	MB3881++	AT
	IC901	VHiNJM2143R-1	NJM2143R, 2.8V/2.5V Reg	AE
	IC1201	RH-iX0891TAZZQ	IX0891TA, Detail Enhancer	AY
	IC1401	VHiNJM2538B-1	NJM2538B, Video Out	AM
	IC1431	VHiNJM2535V-1	NJM2535V, Video In SW	AE
	IC1602	VHiPCM3008+-1Y	PCM3008+, 16Bit ADC/ DAC	AN
	IC1701	VHiLB11990W-1	LB11990W, Motor Driver	AR
	IC1901	VHiLV4051AT-1	LV4051AT, Power Check	AE
	IC2501	VHiUPD16835-1	UPD16835, Lens Driver	AM
	IC2502	VHiNJM2902V-1	NJM2902V, Op-Amp	AD
	IC2507	VHiNJM2902V-1	NJM2902V, Op-Amp	AD
	IC2800	VHiMM1323XV-1	MM1323XV, LCD Interface	AN
	IC3401	VHiBH7277KV-1	BH7277KV, EQ/PLL IC	AX
	IC3402	VHiTLC2940/-1	TLC2940, VCO IC	AM
	IC3403	VHiTCSZ04U/-1	TCSZ04U, INV IC	AE
	IC3404	VHiADC08351-1	ADC08351, A/D CONV IC	AN
	IC3405	VHiSN2G53CT-1	SN2G53CT, SW IC	AE
	IC4401	RH-iX0707TAZZ	IX0707TA, Digital ADC/ DAC	BC
	IC4461	VHiSN2G53CT-1	SN2G53CT, VCTL SW	AE
	IC4471	VHiTC7S04U/-1	TC7S04U, Inverter	AE
	IC4472	VHiTC7S08U/-1	TC7S08U, OSD Mute	AE
	IC4701	VHiMB88344F-1	MB88344F, D/A Converter	AV
	IC8800	VHiAN2536FH-1Q	AN2536FH, VF RGB Decorder Controler	AX

TRANSISTORS

Q504	VSRT1N441U/-1	RT1N441U	AB
Q701	VSUN9214///-1	UN9214	AB
Q702	VS2SA1989R/-1	2SA1989R	AB
Q705	VS2SA1989R/-1	2SA1989R	AB
Q900	VSCPH6702++-1	CPH6702++	AD
Q901	VS2SC4213B/-1	2SC4213B	AC
Q902	VSFMMT717//-1	FMMT717	AE
Q903	VSCPH6702++-1	CPH6702++	AD
Q904	VSCPH6702++-1	CPH6702++	AD
Q905	VSFMMT619//-1	FMMT619	AE

Ref. No.	Part No.	★	Description	Code
Q906	VSCPH6702++-1		CPH6702++	AD
Q907	VSCPH6702++-1		CPH6702++	AD
Q908	VSCPH6702++-1		CPH6702++	AD
Q909	VSNDS355AN/-1		NDS355AN	AE
Q910	VSNDS355AN/-1		NDS355AN	AE
Q911	VSCPH6702++-1		CPH6702++	AD
Q1401	VSRT1N441U/-1		RT1N441U	AB
Q1431	VSRN4986///-1		RN4986	AB
Q1434	VSHN2A01FU/-1		HN2A01FU	AC
Q1701	VSHN2C01FU/-1		HN2C01FU	AC
Q1905	VSNDS332P//-1		NDS332P	AD
Q1906	VSRT1N441U/-1		RT1N441U	AB
Q1908	VS2SA1989R/-1		2SA1989R	AB
Q1909	VSRN4984///-1		RN4984	AC
Q1911	VS2SC4944Y/-1		2SC4944Y	AC
Q1913	VS2SC5383F/-1		2SC5383F	AB
Q1914	VSHN2A01FU/-1		HN2A01FU	AC
Q1920	VS3LP01S+++-1Y		3LP01S+++	AC
Q1921	VSRN4984///-1		RN4984	AC
Q1936	VSFC117++++-1		FC117++++	AD
Q1938	VSRN1704///-1		RN1704	AC
Q1940	VSRN4984///-1		RN4984	AC
Q1941	VSCPH3109//-1		CPH3109	AD
Q1942	VS2SC4944Y/-1		2SC4944Y	AC
Q1943	VSRT1N441U/-1		RT1N441U	AB
Q1944	VSRN4984///-1		RN4984	AC
Q1945	VS2SC5383F/-1		2SC5383F	AB
Q1947	VSRN4990///-1		RN4990	AC
Q2501	VSRT1N141U/-1		RT1N141U	AB
Q2502	VSRT1N141U/-1		RT1N141U	AB
Q2503	VSRN1704///-1		RN1704	AC
Q2504	VS2SC5383F/-1		2SC5383F	AB
Q2507	VS2SA1588Y/-1		2SA1588Y	AC
Q2508	VS2SC5383F/-1		2SC5383F	AB
Q2510	VS2SC5383F/-1		2SC5383F	AB
Q2800	VS3LN01S///-1		3LN01S	AC
Q3401	VS2SC4738Y/-1		2SC4738Y	AA
Q3404	VS2SC4738Y/-1		2SC4738Y	AA
Q3406	VSXP05534//-1		XP05534	AD
Q4431	VSRN4986///-1		RN4986	AB
Q4432	VSHN2A01FU/-1		HN2A01FU	AC
Q4440	VSHN2A01FU/-1		HN2A01FU	AC
Q4442	VS2SA1989R/-1		2SA1989R	AB
Q4443	VSHN1B04FU/-1		HN1B04FU	AC
Q4461	VSHN2A01FU/-1		HN2A01FU	AC
Q4462	VS2SC5383F/-1		2SC5383F	AB
Q4471	VSHN1B04FU/-1		HN1B04FU	AC
Q4481	VSHN1B04FU/-1		HN1B04FU	AC
Q4482	VSHN1B04FU/-1		HN1B04FU	AC
Q7401	VS2SC5383F/-1		2SC5383F	AB
Q7402	VSRT1N441U/-1		RT1N441U	AB
Q7403	VS2SC5383F/-1		2SC5383F	AB
Q8800	VSHN1B04FU/-1		HN1B04FU	AC

DIODES

D403	VHDHVU362//-1		HVU362	AE
D404	VHDHVU362//-1		HVU362	AE
D471	VHDHVU362//-1		HVU362	AE
D472	VHDHVU359TR-1		HVU359TR	AE
D900	RH-EX1394CEZZ		Zener Diode, EX1394CE	AB
D901	VHDMA4S159/-1		MA4S159	AC
D902	VHDMA4S159/-1		MA4S159	AC
D1900	VHDMA132WK/-1		MA132WK	AA
D2501	VHDMC2852//-1		MC2852	AB
D2504	VHDMC2852//-1		MC2852	AB
D4451	VHDKV1812K/-1		KV1812K	AD
D4452	VHDKV1812K/-1		KV1812K	AD
D7800	VHDHVC359TR-1		HVC359TR	AD

PACKAGED CIRCUITS

TH3401	VHHT1682J44-1		Thermistor	AC
X401	RCRSC0160TAZZ		Crystal, CRSC0160TA	AH
X702	RCRSC0183TAZZ		Crystal, CRSC0183TA	AH
X4451	RCRSC0167TAZZ		Crystal, CRSC0167TA	AM

Ref. No.	Part No.	★	Description	Code

COILS AND TRANSFORMER

FL403	RFiLC0164TAZZ		Filter	AH
FL501	RFiLZ0169TAZZY		Filter	AD
FL3401	RCiLF0408TAZZ		Coil, CiLF0408TA	AG
FL3402	RCiLF0408TAZZ		Coil, CiLF0408TA	AG
FL3403	RCiLF0409TAZZ		Coil, CiLF0409TA	AG
L204	VPCEM470M3R7N		Peaking, 47µH	AC
L403	VPMAN100MR50N		Peaking, 10µH	AC
L471	VPD9M8R2J2R0N		Peaking, 8.2µH	AC
L501	VPMAN100MR50N		Peaking, 10µH	AC
L701	VPMAN100MR50N		Peaking, 10µH	AC
L900	RCiLP0323TAZZ		Coil, 4.7µH	AD
L901	RCiLP0311TAZZ		Coil, 15µH	AE
L902	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L903	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L904	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L905	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L906	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L907	RCiLP0311TAZZ		Coil, 15µH	AE
L908	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L909	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L910	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L911	RCiLP0311TAZZ		Coil, 15µH	AE
L912	VPBAM2R2M090N		Peaking, 2.2µH	AC
L913	VPM6N100MR75N		Peaking, 10µH	AC
L914	VPM6N100MR75N		Peaking, 10µH	AC
L915	RCiLP0323TAZZ		Coil, 4.7µH	AD
L916	RCiLP0313TAZZ		Coil, 33µH	AE
L917	RCiLP0313TAZZ		Coil, 33µH	AE
L918	RCiLP0311TAZZ		Coil, 15µH	AE
L919	VPBAM2R2M090N		Peaking, 2.2µH	AC
L920	VPM6N100MR75N		Peaking, 10µH	AC
L921	VPM6N100MR75N		Peaking, 10µH	AC
L922	RCiLP0323TAZZ		Coil, 4.7µH	AD
L923	RCiLP0311TAZZ		Coil, 15µH	AE
L924	RCiLP0323TAZZ		Coil, 4.7µH	AD
L925	VPCEM2R2MR23N		Peaking, 2.2µH	AC
L990	RCiLP0323TAZZ		Coil, 4.7µH	AD
L1402	VPCEM470M3R7N		Peaking, 47µH	AC
L1404	VPCEM470M3R7N		Peaking, 47µH	AC
L1431	VPCEM470M3R7N		Peaking, 47µH	AC
L1601	VPMAN100MR50N		Peaking, 10µH	AC
L1701	VPMAN100MR50N		Peaking, 10µH	AC
L1702	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L2501	VPCEM100MR70N		Peaking, 10µH	AC
L2502	VPCEM220M1R7NY		Peaking, 22µH	AC
L2800	VPCEM470M3R7N		Peaking, 47µH	AC
L2801	VPCEM470M3R7N		Peaking, 47µH	AC
L3401	RCiLP0276TAZZ		Coil, CiLP0276TA	AC
L3402	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L3404	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L3405	VPCEM4R7MR40N		Peaking, 4.7µH	AC
L4401	VPCEM100MR70N		Peaking, 10µH	AC
L4451	RCiLP0353TAZZY		Coil, CiLP0353TA	AC
L4481	VPCEM470M3R7N		Peaking, 47µH	AC
L7400	VPMAN100MR50N		Peaking, 10µH	AC
L7800	VPCEM100MR70N		Peaking, 10µH	AC
L7801	VPD9M180J2R4N		Peaking, 18µH	AC
L8800	VPMAN100MR50N		Peaking, 10µH	AC
L8801	VPMAN100MR50N		Peaking, 10µH	AC
L8804	VPCEM100MR70N		Peaking, 10µH	AC
L8805	VPCEM470M3R7N		Peaking, 47µH	AC
⚠ T900	RTRNZ0152TAZZ		Power Transformer	AF

CAPACITORS

C202	VCSAPR0JJ106M	10	6.3V	Tantalum	AD
C203	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C204	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C205	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C208	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C209	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C210	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C211	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C212	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C213	VCSAPR0JJ106M	10	6.3V	Tantalum	AD

Ref. No.	Part No.	★	Description			Code
C215	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C222	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C223	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C224	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C226	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C227	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C228	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C230	VCSATA0JJ156M		15	6.3V	Tantalum	AC
C231	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C235	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C237	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C238	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C239	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C240	VCCCCZ1HH6R0D		6p	50V	Ceramic	AA
C401	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C402	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C403	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C404	VCSAPR1AJ475M		4.7	10V	Tantalum	AD
C405	VCKYCZ1AB473K		0.047	10V	Ceramic	AB
C407	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C410	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C411	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C412	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C413	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C414	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C415	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C416	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C417	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C418	VCCCCZ1HH100D		10p	50V	Ceramic	AB
C419	VCCCCZ1HH100D		10p	50V	Ceramic	AB
C420	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C421	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C422	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C423	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C424	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C425	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C430	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C432	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C435	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C447	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C450	RC-KZ0115TAZZ		4.7	6.3V	Ceramic	AD
C451	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C452	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C456	VCSATA0JJ106M		10	6.3V	Tantalum	AD
C460	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C462	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C463	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C465	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C473	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C474	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C475	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C476	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C501	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C502	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C503	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C504	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C506	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C507	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C508	VCSATA1AJ106M		10	10V	Tantalum	AC
C509	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C511	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C512	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C513	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C514	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C515	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C516	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C701	VCKYCY1AF105Z		1	10V	Ceramic	AC
C702	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C704	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C705	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C706	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C707	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C709	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C711	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C712	VCKYCY0JB105K		1	6.3V	Ceramic	AC

Ref. No.	Part No.	★	Description			Code
C713	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C716	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C718	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C719	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C720	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C721	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C722	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C723	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C724	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C725	VCKYCZ1EB682K		6800p	25V	Ceramic	AB
C726	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C727	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C728	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C729	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C730	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C731	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C732	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C733	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C734	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C735	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C737	VCKYCZ1EB682K		6800p	25V	Ceramic	AB
C739	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C740	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C741	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C742	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C743	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C900	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C901	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C904	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C905	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C906	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C907	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C908	VCKYCZ1AB473K		0.047	10V	Ceramic	AB
C910	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C911	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C912	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C913	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C914	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C915	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C916	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C917	VCKYCZ1HB221K		220p	50V	Ceramic	AA
C918	VCKYCZ1HB221K		220p	50V	Ceramic	AA
C919	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C920	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C921	VCKYCY1AF105Z		1	10V	Ceramic	AC
C922	VCKYCY1AF105Z		1	10V	Ceramic	AC
C923	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C924	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C926	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C927	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C928	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C929	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C930	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C931	RC-KZ0075TAZZ		2.2	16V	Ceramic	AC
C932	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C933	RC-KZ0044TAZZ		4.7	10V	Ceramic	AD
C934	RC-KZ0071TAZZ		2.2	6.3V	Ceramic	AD
C935	VCKYTV1AB105K		1	10V	Ceramic	AD
C936	VCSATE1AJ476M		47	10V	Tantalum	AD
C937	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C938	RC-KZ0074TAZZ		10	6.3V	Ceramic	AF
C939	VCKYTV1AB105K		1	10V	Ceramic	AD
C941	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C943	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C946	VCKYTV1AB105K		1	10V	Ceramic	AD
C948	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C949	VCKYTV1AB105K		1	10V	Ceramic	AD
C950	VCKYTV1AB105K		1	10V	Ceramic	AD
C951	VCKYTV1AB105K		1	10V	Ceramic	AD
C952	RC-KZ0071TAZZ		2.2	6.3V	Ceramic	AD
C953	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C954	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C955	RC-KZ0075TAZZ		2.2	16V	Ceramic	AC
C956	RC-KZ0044TAZZ		4.7	10V	Ceramic	AD
C957	VCKYTV1AB105K		1	10V	Ceramic	AD

Ref. No.	Part No.	★	Description			Code
C959	VCKYTV1EB104K		0.1	25V	Ceramic	AB
C960	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C961	VCKYCZ1HB222K		2200p	50V	Ceramic	AB
C962	RC-KZ0072TAZZ		1	25V	Ceramic	AC
C963	RC-KZ0072TAZZ		1	25V	Ceramic	AC
C964	VCKYTV1CF105Z		1	16V	Ceramic	AB
C965	VCKYTV1EB104K		0.1	25V	Ceramic	AB
C966	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C967	VCKYTV1AB105K		1	10V	Ceramic	AD
C968	RC-KZ0072TAZZ		1	25V	Ceramic	AC
C969	VCKYTV1CF105Z		1	16V	Ceramic	AB
C970	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C971	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C972	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C973	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C974	RC-KZ0070TAZZ		4.7	16V	Ceramic	AD
C980	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C981	RC-KZ0075TAZZ		2.2	16V	Ceramic	AC
C982	RC-KZ0044TAZZ		4.7	10V	Ceramic	AD
C983	VCKYTV1AB105K		1	10V	Ceramic	AD
C990	RC-KZ0075TAZZ		2.2	16V	Ceramic	AC
C991	RC-KZ0044TAZZ		4.7	10V	Ceramic	AD
C992	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C993	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C1201	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C1202	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C1203	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C1402	VCSATE1AJ226M		22	10V	Tantalum	AD
C1404	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1405	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C1406	VCSATE0JJ107M		100	6.3V	Tantalum	AE
C1407	VCSATA0JJ156M		15	6.3V	Tantalum	AC
C1408	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C1409	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1410	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1411	VCSATE0JJ107M		100	6.3V	Tantalum	AE
C1412	VCSATA0JJ156M		15	6.3V	Tantalum	AC
C1413	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C1414	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1415	VCSATE1AJ226M		22	10V	Tantalum	AD
C1416	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1417	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1418	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1431	VCSATE1AJ226M		22	10V	Tantalum	AD
C1438	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1439	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C1440	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C1603	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C1604	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C1605	RC-KZ0071TAZZ		2.2	6.3V	Ceramic	AD
C1608	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C1610	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1611	VCKYCY1AB474K		0.47	10V	Ceramic	AC
C1617	VCKYCY1AB474K		0.47	10V	Ceramic	AC
C1701	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C1702	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C1703	VCKYTV1AB105K		1	10V	Ceramic	AD
C1704	VCKYCY1AF105Z		1	10V	Ceramic	AC
C1705	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C1706	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1707	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1708	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C1709	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1710	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1711	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C1712	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1713	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C1714	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1715	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C1716	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C1717	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1718	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1719	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C1720	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1721	VCKYCY0JF105Z		1	6.3V	Ceramic	AB

Ref. No.	Part No.	★	Description			Code
C1722	VCKYCZ1AB473K		0.047	10V	Ceramic	AB
C1723	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C1724	VCKYCY1AF105Z		1	10V	Ceramic	AC
C1725	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1726	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C1727	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C1728	VCKYCY1AF105Z		1	10V	Ceramic	AC
C1906	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C1911	VCKYTV1EB104K		0.1	25V	Ceramic	AB
C1921	VCSATA1CJ106M		10	16V	Tantalum	AD
C1922	VCKYTV1EB104K		0.1	25V	Ceramic	AB
C1980	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C1993	VCSATA1EJ105M		1	25V	Tantalum	AC
C2501	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2502	VCCCCZ1HH330J		33p	50V	Ceramic	AB
C2503	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2504	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2505	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2506	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2507	VCSATA1CJ106M		10	16V	Tantalum	AD
C2508	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2509	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C2510	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2511	VCSATA1AJ106M		10	10V	Tantalum	AC
C2512	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2513	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C2515	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2516	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C2517	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C2518	VCCCCZ1HH151J		150p	50V	Ceramic	AB
C2520	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2530	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C2531	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C2542	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2544	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C2546	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2548	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C2549	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C2551	VCCCCZ1HH151J		150p	50V	Ceramic	AB
C2552	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2555	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C2556	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C2800	VCKYTV1AB105K		1	10V	Ceramic	AD
C2801	VCSATA1AJ106M		10	10V	Tantalum	AC
C2802	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C2803	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C2804	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C2805	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C2807	VCKYCZ1HF103Z		0.01	50V	Ceramic	AB
C2808	VCCCCZ1HH560J		56p	50V	Ceramic	AB
C3401	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C3402	VCCCCZ1HH120J		12p	50V	Ceramic	AB
C3403	VCCCCZ1HH390J		39p	50V	Ceramic	AB
C3405	VCCCCZ1HH820J		82p	50V	Ceramic	AB
C3406	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C3408	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3409	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C3410	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3411	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C3412	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3413	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3414	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3415	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3416	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3417	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3418	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3419	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3420	VCCCCZ1HH100D		10p	50V	Ceramic	AB
C3421	VCCCCZ1HH121J		120p	50V	Ceramic	AB
C3423	VCCCCZ1HH121J		120p	50V	Ceramic	AB
C3424	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3425	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C3426	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3428	VCKYTV1CB105K		1	16V	Ceramic	AC
C3429	VCKYCZ1HB102K		1000p	50V	Ceramic	AB

Ref. No.	Part No.	★		Description		Code
C3430	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3431	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3432	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3433	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3434	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3436	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C3442	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C3443	VCCCCZ1HH470J		47p	50V	Ceramic	AB
C3444	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3452	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3454	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C3455	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3456	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C3457	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3458	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3462	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3467	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3470	VCCCCZ1HH5R0C		5p	50V	Ceramic	AC
C3471	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3473	VCSATA0YJ336M		33		Tantalum	AD
C3474	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3475	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3476	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3477	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3479	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3481	VCCCCZ1HH100D		10p	50V	Ceramic	AB
C4401	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C4402	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C4403	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C4404	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C4405	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4407	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4408	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4409	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4410	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C4411	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4412	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C4413	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4414	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C4417	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4419	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4420	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4422	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4423	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4424	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4425	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4427	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4429	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4431	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4432	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4435	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C4436	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4440	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C4441	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4451	VCCCCZ1HH330J		33p	50V	Ceramic	AB
C4454	VCCCCZ1HH330J		33p	50V	Ceramic	AB
C4461	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C4462	VCKYCZ1EB682K		6800p	25V	Ceramic	AB
C4463	VCKYCZ1EB682K		6800p	25V	Ceramic	AB
C4464	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4465	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C4466	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4481	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C4482	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C4483	VCSAPR1AJ475M		4.7	10V	Tantalum	AD
C4484	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C4485	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C4701	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C4702	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C7400	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C7401	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C7402	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7403	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7404	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C7413	VCKYCZ1HB221K		220p	50V	Ceramic	AA
C7414	VCCCCZ1HH330J		33p	50V	Ceramic	AB
C7417	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C7800	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C7801	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7802	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7803	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7813	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7815	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C7816	VCCCCZ1HH470J		47p	50V	Ceramic	AB
C7837	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C7842	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C7843	RC-KZ0101TAZZ		3.3	6.3V	Ceramic	AD
C7844	VCKYCZ1HB332K		3300p	50V	Ceramic	AA
C8800	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C8801	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C8802	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C8804	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C8805	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C8806	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C8808	VCKYTV1CB105K		1	16V	Ceramic	AC
C8809	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C8815	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C8816	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C8817	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C8818	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C8824	RC-KZ0083TAZZ		2.2	10V	Ceramic	AD
C8825	VCKYCZ1HB152K		1500p	50V	Ceramic	AB
C8829	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C8831	RC-KZ0055TAZZ		3.3	16V	Ceramic	AD
C8832	VCKYTV1CB105K		1	16V	Ceramic	AC
C8861	VCSAPR1AJ475M		4.7	10V	Tantalum	AD
C8862	VCKYCZ1HB681K		680p	50V	Ceramic	AB
C8863	VCSAPR0JJ106M		10	6.3V	Tantalum	AD

RESISTORS

R201	VRK-SB1FF473J	47k	0.0315W	Metal Composition	AB
R202	VRK-SB1FF473J	47k	0.0315W	Metal Composition	AB
R203	VRK-SB1FF473J	47k	0.0315W	Metal Composition	AB
R204	VRK-SA1JF473J	47k	1/16W	Metal Composition	AC
R205	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R206	VRK-SA1JF102J	1k	1/16W	Metal Composition	AB
R207	VRK-SB1FF102J	1k	0.0315W	Metal Composition	AC
R208	VRK-SB1FF102J	1k	0.0315W	Metal Composition	AC
R209	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R213	VRK-SB1FF102J	1k	0.0315W	Metal Composition	AC
R235	VRS-CZ1JF333J	33k	1/16W	Metal Oxide	AA
R242	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R243	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R244	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R251	VRS-CZ1JF103J	10k	1/16W	Metal Oxide	AA
R401	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R402	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R403	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R404	VRS-CZ1JF102J	1k	1/16W	Metal Oxide	AA
R405	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R406	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R407	VRS-CZ1JF153J	15k	1/16W	Metal Oxide	AA
R409	VRS-CZ1JF103J	10k	1/16W	Metal Oxide	AA
R410	VRS-CZ1JF103J	10k	1/16W	Metal Oxide	AA
R411	VRS-CZ1JF154J	150k	1/16W	Metal Oxide	AA
R412	VRS-CZ1JF334J	330k	1/16W	Metal Oxide	AA
R413	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R414	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R416	VRS-CZ1JF823J	82k	1/16W	Metal Oxide	AA
R418	VRS-CZ1JF101J	100	1/16W	Metal Oxide	AA
R429	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA
R431	VRS-CZ1JF000J	0	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R432	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R436	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R437	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R438	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R440	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R441	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R442	VRS-CZ1JF114J		110k 1/16W Metal Oxide	AB
R443	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R446	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R462	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R463	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R467	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R468	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R471	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R477	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R478	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R480	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R504	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R505	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R506	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R509	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R514	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R516	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R517	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R518	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R519	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R520	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R521	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R522	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R523	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R526	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R531	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R532	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R533	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R535	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R536	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R537	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R703	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R704	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R706	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R707	VRS-CZ1JF683D		68k 1/16W Metal Oxide	AB
R708	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R710	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R711	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R713	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R716	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R718	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R719	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R720	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R723	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R724	VRS-CZ1JF823D		82k 1/16W Metal Oxide	AB
R725	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R729	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R730	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R732	VRS-CZ1JF474D		470k 1/16W Metal Oxide	AA
R733	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R734	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R735	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R736	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R737	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R738	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R739	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R740	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R741	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R744	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R746	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R747	VRS-CZ1JF683J		68k 1/16W Metal Oxide	AA
R749	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R750	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R751	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R752	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R753	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R754	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R755	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R756	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R757	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R758	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R759	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R761	VRK-SB1FF102J		1k 0.0315W Metal Composition	AC
R762	VRK-SB1FF104J		100k 0.0315W Metal Composition	AD
R763	VRK-SB1FF102J		1k 0.0315W Metal Composition	AC
R764	VRK-SB1FF104J		100k 0.0315W Metal Composition	AD
R769	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R770	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R771	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R772	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R774	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R776	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R779	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R780	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R782	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R795	VRS-CZ1JF683D		68k 1/16W Metal Oxide	AB
R796	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R797	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R798	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R900	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R901	VRS-CZ1JF433D		43k 1/16W Metal Oxide	AA
R902	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R903	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R904	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R905	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R906	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R907	VRS-CZ1JF822J		8.2k 1/16W Metal Oxide	AA
R908	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R909	VRS-CZ1JF562D		5.6k 1/16W Metal Oxide	AB
R910	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R912	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R913	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R914	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R917	VRS-CZ1JF471J		470 1/16W Metal Oxide	AA
R918	VRS-CZ1JF472D		4.7k 1/16W Metal Oxide	AB
R919	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R920	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R922	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R923	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R924	VRS-CZ1JF113D		11k 1/16W Metal Oxide	AA
R925	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R926	VRS-CZ1JF333D		33k 1/16W Metal Oxide	AB
R927	VRS-CZ1JF683D		68k 1/16W Metal Oxide	AB
R928	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R929	VRS-CZ1JF823D		82k 1/16W Metal Oxide	AB
R930	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R931	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R932	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R933	VRS-CZ1JF683J		68k 1/16W Metal Oxide	AA
R934	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R935	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R936	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R937	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R938	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R939	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R940	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R941	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R942	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R943	VRS-CZ1JF303D		30k 1/16W Metal Oxide	AA
R946	VRS-CZ1JF163D		16k 1/16W Metal Oxide	AA
R947	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R948	VRS-CZ1JF473D		47k 1/16W Metal Oxide	AB
R949	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R950	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R951	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R952	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R953	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R954	VRS-CZ1JF333D		33k 1/16W Metal Oxide	AB
R956	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R957	VRS-CZ1JF333D		33k 1/16W Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code
R958	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R959	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R960	VRS-CZ1JF392D		3.9k 1/16W Metal Oxide	AB
R962	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R964	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R965	VRS-CZ1JF122D		1.2k 1/16W Metal Oxide	AB
R966	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R968	VRS-CZ1JF222D		2.2k 1/16W Metal Oxide	AA
R969	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R970	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R972	VRS-CZ1JF133D		13k 1/16W Metal Oxide	AA
R973	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R974	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R975	VRS-CZ1JF331J		330 1/16W Metal Oxide	AA
R977	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R979	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R980	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R982	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R983	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R984	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R987	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R988	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R989	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R990	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R991	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R992	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R993	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R994	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R995	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R996	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R997	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R999	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1201	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1202	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1401	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1402	VRS-CZ1JF470J		47 1/16W Metal Oxide	AA
R1403	VRS-CZ1JF470J		47 1/16W Metal Oxide	AA
R1404	VRS-CZ1JF270J		27 1/16W Metal Oxide	AA
R1408	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1413	VRS-CZ1JF470J		47 1/16W Metal Oxide	AA
R1414	VRS-CZ1JF270J		27 1/16W Metal Oxide	AA
R1415	VRS-CZ1JF225J		2.2M 1/16W Metal Oxide	AA
R1419	VRS-CZ1JF270J		27 1/16W Metal Oxide	AA
R1438	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R1439	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R1440	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R1441	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R1442	VRS-CZ1JF750J		75 1/16W Metal Oxide	AA
R1452	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R1454	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R1455	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1456	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1462	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R1473	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1474	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1475	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1476	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1477	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1602	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1701	VRK-SA1JF100J		10 1/16W Metal Composition	AB
R1702	VRK-SA1JF182J		1.8k 1/16W Metal Composition	AC
R1703	VRK-SA1JF182J		1.8k 1/16W Metal Composition	AC
R1704	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1705	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R1706	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1707	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1708	VRS-CZ1JF1R0J		1 1/16W Metal Oxide	AA
R1709	VRS-CZ1JF1R0J		1 1/16W Metal Oxide	AA
R1710	VRS-CZ1JF1R0J		1 1/16W Metal Oxide	AA
R1711	VRS-CZ1JF1R0J		1 1/16W Metal Oxide	AA
R1712	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R1713	VRS-CZ1JF331J		330 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R1714	VRS-CZ1JF621J		620 1/16W Metal Oxide	AA
R1715	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1716	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1717	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R1718	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R1719	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R1720	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1721	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1722	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1723	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1724	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1726	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R1901	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R1902	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R1903	VRS-CZ1JF473D		47k 1/16W Metal Oxide	AB
R1904	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R1905	VRS-CZ1JF133D		13k 1/16W Metal Oxide	AA
R1912	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1913	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R1914	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1917	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1925	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R1927	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R1929	VRS-CZ1JF393D		39k 1/16W Metal Oxide	AB
R1930	VRS-CZ1JF182D		1.8k 1/16W Metal Oxide	AB
R1931	VRS-CZ1JF822D		8.2k 1/16W Metal Oxide	AA
R1934	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R1935	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R1936	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R1937	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R1940	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1941	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1942	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1943	VRS-CZ1JF333D		33k 1/16W Metal Oxide	AB
R1944	VRS-CZ1JF822D		8.2k 1/16W Metal Oxide	AA
R1945	VRS-CZ1JF183D		18k 1/16W Metal Oxide	AB
R1948	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1949	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1950	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1951	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1956	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R1957	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R1958	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1959	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R1961	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1968	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R1969	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1980	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R1981	VRS-CZ1JF184J		180k 1/16W Metal Oxide	AA
R1982	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1983	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R1984	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R1985	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1986	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R1989	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1990	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1991	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1992	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R2501	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R2502	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R2503	VRS-CZ1JF4R7J		4.7 1/16W Metal Oxide	AA
R2504	VRS-CZ1JF4R7J		4.7 1/16W Metal Oxide	AA
R2505	VRS-CZ1JF4R7J		4.7 1/16W Metal Oxide	AA
R2506	VRS-CZ1JF4R7J		4.7 1/16W Metal Oxide	AA
R2507	VRS-CZ1JF622D		6.2k 1/16W Metal Oxide	AA
R2508	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R2509	VRS-CZ1JF822D		8.2k 1/16W Metal Oxide	AA
R2510	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R2511	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R2512	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R2513	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R2514	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R2515	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R2516	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R2517	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R2518	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R2519	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R2520	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R2521	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R2522	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R2523	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R2524	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R2525	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R2526	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R2527	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R2528	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R2529	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R2530	VRS-CZ1JF471J		470 1/16W Metal Oxide	AA
R2532	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R2533	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R2534	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R2537	VRS-CZ1JF180J		18 1/16W Metal Oxide	AA
R2538	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2581	VRS-CZ1JF180J		18 1/16W Metal Oxide	AA
R2582	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R2583	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R2584	VRS-CZ1JF622D		6.2k 1/16W Metal Oxide	AA
R2585	VRS-CZ1JF104D		100k 1/16W Metal Oxide	AB
R2586	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R2587	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R2588	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R2589	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R2590	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R2592	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R2593	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R2594	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R2604	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R2605	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R2606	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R2610	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R2615	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R2616	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R2617	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R2623	VRS-CZ1JF471J		470 1/16W Metal Oxide	AA
R2800	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2801	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2802	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2810	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R2811	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R2812	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2813	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R2814	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R2815	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R2818	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2819	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2820	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2822	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2823	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2824	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2825	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2831	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R2833	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3401	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R3402	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3403	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3404	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R3406	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R3407	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R3409	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R3410	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R3411	VRS-CZ1JF391J		390 1/16W Metal Oxide	AA
R3412	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R3413	VRS-CZ1JF391J		390 1/16W Metal Oxide	AA
R3414	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3415	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R3416	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R3417	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R3418	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R3419	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R3420	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R3421	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R3422	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R3423	VRS-CZ1JF182J		1.8k 1/16W Metal Oxide	AA
R3424	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R3425	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R3427	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R3428	VRS-CZ1JF273D		27k 1/16W Metal Oxide	AA
R3429	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R3430	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R3432	VRS-CZ1JF333D		33k 1/16W Metal Oxide	AB
R3435	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R3436	VRS-CZ1JF182J		1.8k 1/16W Metal Oxide	AA
R3437	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3442	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R3445	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R3450	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3451	VRS-CZ1JF334J		330k 1/16W Metal Oxide	AA
R3452	VRS-CZ1JF820J		82 1/16W Metal Oxide	AA
R3453	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3454	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3457	VRS-CZ1JF820J		82 1/16W Metal Oxide	AA
R3462	VRS-CZ1JF271J		270 1/16W Metal Oxide	AA
R3463	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R3468	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R3469	VRS-CZ1JF390J		39 1/16W Metal Oxide	AA
R3470	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R3471	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R3472	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3473	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3478	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R3479	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R3480	VRS-CZ1JF681J		680 1/16W Metal Oxide	AA
R3481	VRS-CZ1JF680J		68 1/16W Metal Oxide	AB
R3482	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R3486	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3487	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R3488	VRS-CZ1JF681D		680 1/16W Metal Oxide	AB
R3489	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R3492	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R3493	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R3495	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R3496	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R3497	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3498	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R4401	VRS-CZ1JF2R2JY		2.2 1/16W Metal Oxide	AA
R4402	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4403	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4404	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R4405	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4406	VRS-CZ1JF181J		180 1/16W Metal Oxide	AA
R4407	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4408	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R4409	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4410	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R4411	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4412	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R4413	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4414	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4415	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4416	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R4417	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R4418	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R4419	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R4420	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R4421	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R4422	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R4423	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R4427	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R4429	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R4430	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R4435	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R4436	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R4437	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R4440	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R4441	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R4442	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R4443	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R4444	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R4445	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R4446	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R4447	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R4448	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R4450	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4451	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R4453	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R4454	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R4456	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R4460	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4461	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R4462	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R4463	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R4464	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R4465	VRS-CZ1JF273D		27k 1/16W Metal Oxide	AA
R4467	VRS-CZ1JF302D		3k 1/16W Metal Oxide	AA
R4468	VRS-CZ1JF562D		5.6k 1/16W Metal Oxide	AB
R4469	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R4473	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R4474	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R4475	VRS-CZ1JF272J		2.7k 1/16W Metal Oxide	AA
R4477	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R4478	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R4485	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R4486	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA
R4487	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R4488	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R4494	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R4499	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R5701	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R7401	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R7402	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R7403	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R7410	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R7413	VRS-CZ1JF512D		5.1k 1/16W Metal Oxide	AA
R7415	VRS-CZ1JF560D		56 1/16W Metal Oxide	AB
R7416	VRS-CZ1JF560D		56 1/16W Metal Oxide	AB
R7417	VRS-CZ1JF560D		56 1/16W Metal Oxide	AB
R7418	VRS-CZ1JF560D		56 1/16W Metal Oxide	AB
R7419	VRS-CZ1JF221J		220 1/16W Metal Oxide	AA
R7420	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R7422	VRS-CZ1JF392D		3.9k 1/16W Metal Oxide	AB
R7423	VRS-CZ1JF392D		3.9k 1/16W Metal Oxide	AB
R7424	VRS-CZ1JF242D		2.4k 1/16W Metal Oxide	AA
R7800	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R7801	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R7802	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R7803	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R7804	VRS-CZ1JF151J		150 1/16W Metal Oxide	AA
R7805	VRS-CZ1JF272D		2.7k 1/16W Metal Oxide	AB
R7806	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R7807	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R7808	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R7809	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R7810	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R7811	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R7812	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R7813	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R7814	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R7827	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R7841	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R7843	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R7847	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R7851	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R7852	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R7854	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R7855	VRS-CZ1JF683J		68k 1/16W Metal Oxide	AA
R7856	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R7857	VRK-SA1JF564J		560k 1/16W Metal Composition	AC
R7859	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R7861	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8807	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8808	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8809	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8819	VRS-CZ1JF473D		47k 1/16W Metal Oxide	AB
R8826	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R8846	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R8847	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R8848	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R8866	VRS-CZ1JF561J		560 1/16W Metal Oxide	AA
R8867	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R8868	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
R8869	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8881	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R8882	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R8892	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8893	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R8894	VRS-CZ1JF680J		68 1/16W Metal Oxide	AB
R8895	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R8896	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R8899	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA

BALUNES

FB201	RBLN-0049TAZZ	Balun, BLN-0049TA	AD
FB203	RBLN-0049TAZZ	Balun, BLN-0049TA	AD
FB204	RBLN-0049TAZZ	Balun, BLN-0049TA	AD
FB456	RBLN-0102TAZZY	Balun, BLN-0102TA	AB
FB900	RBLN-0119TAZZ	Balun, BLN-0119TA	AC
FB901	RBLN-0119TAZZ	Balun, BLN-0119TA	AC
FB1471	RBLN-0120TAZZ	Balun, BLN-0120TA	AC
FB1472	RBLN-0120TAZZ	Balun, BLN-0120TA	AC
FB4402	RBLN-0102TAZZY	Balun, BLN-0102TA	AB
FB4461	RBLN-0102TAZZY	Balun, BLN-0102TA	AB
FB7401	RBLN-0102TAZZY	Balun, BLN-0102TA	AB
FB8800	RBLN-0028TAZZ	Balun, BLN-0028TA	AB
R420	RBLN-0242TAZZY	Balun, BLN-0242TA	AB
R1470	RBLN-0242TAZZY	Balun, BLN-0242TA	AB
R1471	RBLN-0120TAZZ	Balun, BLN-0120TA	AC
R1472	RBLN-0242TAZZY	Balun, BLN-0242TA	AB
R4495	RBLN-0242TAZZY	Balun, BLN-0242TA	AB

MISCELLANEOUS PARTS

SC201	QCNCW4080TAZZ	Connector, 40Pin	AF
SC701	QSOCN1098TAZZ	Socket, 10Pin	AE
SC703	QCNCW1796TAZZY	Connector, 17Pin	AF
SC900	QCNCW2080TAZZ	Connector, 20Pin	AF
SC1401	QCNCW2197TAZZY	Connector, 21Pin	AG
SC2501	QCNCW2796TAZZ	Connector, 27Pin	AG
SC2801	QCNCW3396TAZZY	Connector, 33Pin	AG
SC3301	QCNCW8080TAZZ	Connector, 80Pin	AH
SC5701	QCNCW3996TAZZY	Connector, 39Pin	AH
SC5702	QCNCW3996TAZZY	Connector, 39Pin	AH
SC5703	QCNCW4501TAN1Y	Connector, 45Pin	AG
SC5704	QCNCW2196TAZZY	Connector, 21Pin	AE
SC8801	QCNCW2196TAZZY	Connector, 21Pin	AF

DUNTK3120QA02
SUB PWB UNIT

INTEGRATED CIRCUITS

IC601	VHiBH7761KV-1	BH7761KV, Audio I/O	AS
IC3701	RH-iXA142WJZZQ	IXA142WJ, Card Micon	AY
IC3702	RH-iX0950TAZZQ	IX0950TA, 16Mbit DRAM	AW
IC3750	VHiRS5C313/-1	RS5C313, Timer	AL
IC6601	VHiBA7780KV-1	BA7780KV, Mic Amp	AT
IC6602	VHiTA75S01F-1	TA75S01F, Amp	AD

TRANSISTORS

Q601	VSFMG12////-1	FMG12	AD
Q602	VSRN4984///-1	RN4984	AC
Q604	VSHN2A01FU/-1	HN2A01FU	AC
Q605	VSRT1N441U/-1	RT1N441U	AB
Q606	VSRN4984///-1	RN4984	AC

Ref. No.	Part No.	★	Description	Code
Q608	VSFMG12////-1		FMG12	AD
Q609	VSHN2C01FU/-1		HN2C01FU	AC
Q3701	VSHN2C01FU/-1		HN2C01FU	AC
Q3704	VS2SA1989R/-1		2SA1989R	AB
Q3705	VSHN2C01FU/-1		HN2C01FU	AC
Q3706	VSRT1N441U/-1		RT1N441U	AB
Q3707	VSRT1N441U/-1		RT1N441U	AB
Q3708	VSMCH6305++-1Y		MCH6305++	AE
Q6602	VS2SC5383F/-1		2SC5383F	AB
Q6603	VSHN2C01FU/-1		HN2C01FU	AC
Q6606	VS2SC5383F/-1		2SC5383F	AB
Q6607	VS2SC5383F/-1		2SC5383F	AB
Q6608	VSFC13/////-1		FC13	AD
Q6609	VSRN4986///-1		RN4986	AB

DIODES

D3751	RH-DX0182TAZZ		DX0182TA	AD
D6601	VHDKDS160E+-1Y		KDS160E+	AB

PACKAGED CIRCUIT

X3750	RCRSC0163TAZZ		Crystal, CRSC0163TA	AG

COILS

FL3701	RFiLZ0003TAZZY		Filter	AD
L601	VPCEM470M3R7N		Peaking, 47µH	AC
L603	VPBWM100KR50N		Peaking, 10µH	AC
L3701	VPMAN100MR50N		Peaking, 10µH	AC
L6601	VPCBM470K2R4N		Peaking, 47µH	AC

CAPACITORS

C603	VCKYTV1CF225Z		2.2	16V	Ceramic	AC
C605	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C606	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C607	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C608	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C610	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C611	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C616	VCKYTV1CF225Z		2.2	16V	Ceramic	AC
C617	VCKYCY0JB105K		1	6.3V	Ceramic	AC
C618	VCKYCY1CB683K		0.068	16V	Ceramic	AC
C619	VCKYCY1CB473K		0.047	16V	Ceramic	AA
C621	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C622	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C623	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C624	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C625	VCKYCY1CB473K		0.047	16V	Ceramic	AA
C626	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C628	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C629	VCKYCZ1EB472K		4700p	25V	Ceramic	AB
C631	VCSAPR1AJ105M		1	10V	Tantalum	AD
C632	VCSATA0JJ226M		22	6.3V	Tantalum	AD
C633	VCSATA0JJ226M		22	6.3V	Tantalum	AD
C635	VCSATE1AJ476M		47	10V	Tantalum	AD
C637	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C638	VCSAPR1AJ475M		4.7	10V	Tantalum	AD
C640	VCSATE1AJ476M		47	10V	Tantalum	AD
C641	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C642	VCSATE0JJ107M		100	6.3V	Tantalum	AE
C644	VCKYCY1CB683K		0.068	16V	Ceramic	AC
C645	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C646	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C647	VCKYCY1CB473K		0.047	16V	Ceramic	AA
C648	VCKYCY1CB473K		0.047	16V	Ceramic	AA
C651	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C661	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C685	VCSATA0JJ226M		22	6.3V	Tantalum	AD
C686	VCSATA0JJ226M		22	6.3V	Tantalum	AD
C3701	VCKYTV1AB105K		1	10V	Ceramic	AD
C3702	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3703	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3704	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3705	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3706	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3707	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C3708	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3709	VCSATA0JJ106M		10	6.3V	Tantalum	AD
C3710	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3711	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3712	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C3714	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C3715	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C3717	VCSATA0JJ336M		33	6.3V	Tantalum	AD
C3718	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3750	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C3751	VCKYCZ1CB103K		0.01	16V	Ceramic	AB
C3752	VCCCCZ1HH150J		15p	50V	Ceramic	AB
C3753	VCCCCZ1HH220J		22p	50V	Ceramic	AB
C3754	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C3755	VCCCCZ1HH221J		220p	50V	Ceramic	AB
C6603	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C6604	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C6605	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C6606	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6607	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6608	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6610	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6611	VCKYCY1CB333K		0.033	16V	Ceramic	AA
C6612	VCKYCY1HB682K		6800p	50V	Ceramic	AA
C6613	VCKYCZ1HB272KY		2700p	50V	Ceramic	AA
C6614	VCKYCY1CB273K		0.027	16V	Ceramic	AA
C6615	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C6616	VCKYCY1EB223K		0.022	25V	Ceramic	AA
C6617	VCKYCY1EB223K		0.022	25V	Ceramic	AA
C6618	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6619	VCKYCZ1CB123K		0.012	16V	Ceramic	AB
C6620	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C6621	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C6622	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6623	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C6626	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6628	VCSAPR0JJ106M		10	6.3V	Tantalum	AD
C6629	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6630	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6631	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6632	VCKYCY1CB333K		0.033	16V	Ceramic	AA
C6633	VCKYCY1CB273K		0.027	16V	Ceramic	AA
C6634	VCKYCZ1HB272KY		2700p	50V	Ceramic	AA
C6635	VCKYCY1HB682K		6800p	50V	Ceramic	AA
C6636	VCKYCY1EB223K		0.022	25V	Ceramic	AA
C6637	VCKYCY1EB223K		0.022	25V	Ceramic	AA
C6638	VCKYCY1CB104K		0.1	16V	Ceramic	AB
C6639	VCKYCZ1CB223K		0.022	16V	Ceramic	AC
C6640	VCKYCZ1CB123K		0.012	16V	Ceramic	AB
C6641	VCKYCZ1HB471K		470p	50V	Ceramic	AB
C6642	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C6643	VCSATA1AJ106M		10	10V	Tantalum	AC
C6644	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C6645	VCKYCY0JF105Z		1	6.3V	Ceramic	AB
C6646	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C6650	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C6651	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C6652	VCKYCY1CB473K		0.047	16V	Ceramic	AA
C6653	VCKYCY1EB223K		0.022	25V	Ceramic	AA
C6654	VCKYCY1AB224K		0.22	10V	Ceramic	AB
C6655	VCKYCZ1HB102K		1000p	50V	Ceramic	AB
C6656	VCSAPD1AJ225M		2.2	10V	Tantalum	AC
C6657	VCSAPD1AJ225M		2.2	10V	Tantalum	AC
C6658	VCKYCZ1AB104K		0.1	10V	Ceramic	AB
C6659	VCKYCZ1AF104Z		0.1	10V	Ceramic	AB
C6660	VCCCCZ1HH101J		100p	50V	Ceramic	AB
C6684	VCKYTV1CF225Z		2.2	16V	Ceramic	AC

RESISTORS

R603	VRS-CZ1JF102J		1k	1/16W	Metal Oxide	AA
R609	VRS-CZ1JF102J		1k	1/16W	Metal Oxide	AA
R610	VRS-CZ1JF562J		5.6k	1/16W	Metal Oxide	AA
R613	VRS-CZ1JF683J		68k	1/16W	Metal Oxide	AA
R614	VRK-SA1JF222J		2.2k	1/16W	Metal Composition	AB
R616	VRS-CZ1JF683J		68k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R621	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R623	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R624	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R625	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R626	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R627	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R628	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R630	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R631	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R632	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R633	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R634	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R635	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R638	VRS-CZ1JF106J		10M 1/16W Metal Oxide	AA
R639	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R640	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R641	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R647	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R648	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R649	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R651	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R652	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R653	VRS-CZ1JF683J		68k 1/16W Metal Oxide	AA
R655	VRK-SA1JF223J		22k 1/16W Metal Composition	AB
R656	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R657	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R658	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R660	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R661	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R662	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R663	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R667	VRS-CZ1JF683J		68k 1/16W Metal Oxide	AA
R668	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R670	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R673	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R676	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R685	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R686	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R687	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R688	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R689	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3705	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3710	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3711	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R3713	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3714	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3715	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R3716	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R3717	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R3718	VRS-CZ1JF474J		470k 1/16W Metal Oxide	AA
R3719	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3720	VRK-SA1JF103J		10k 1/16W Metal Composition	AB
R3721	VRK-SA1JF102J		1k 1/16W Metal Composition	AB
R3722	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3723	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3724	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3725	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3726	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3727	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3728	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3729	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3730	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3731	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3732	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3733	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3734	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3735	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3737	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3750	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3751	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3762	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3765	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R3769	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3770	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3771	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R3772	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3773	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R3774	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3775	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3776	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3777	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3778	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3779	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3780	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R3783	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R3784	VRS-CY1JF000J		0 1/16W Metal Oxide	AA
R3786	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R3787	VRS-CZ1JF222D		2.2k 1/16W Metal Oxide	AA
R3788	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R3789	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R3790	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3791	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3792	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3793	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3794	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3795	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3796	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3797	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R3798	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R3799	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R3800	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3801	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3802	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3803	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3804	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3805	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3806	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3807	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3808	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3809	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3810	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3811	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3812	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3813	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3814	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3815	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3816	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3817	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3818	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R3819	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6603	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R6604	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R6606	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R6607	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R6611	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R6612	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R6615	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R6616	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R6617	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6618	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R6619	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R6620	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R6621	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R6622	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R6623	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R6624	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6625	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R6626	VRS-CZ1JF184J		180k 1/16W Metal Oxide	AA
R6627	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6628	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6629	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6630	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R6632	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R6633	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R6634	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R6635	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6636	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R6637	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
R6638	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R6639	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R6640	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R6641	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R6642	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R6643	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6644	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6645	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6646	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R6647	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R6648	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R6649	VRS-CZ1JF512J		5.1k 1/16W Metal Oxide	AB
R6650	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6651	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R6656	VRS-CZ1JF824J		820k 1/16W Metal Oxide	AA
R6657	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R6658	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R6659	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R6660	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R6661	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R6662	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R6663	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R6665	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R6672	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA

BALUNES

FB3701	RBLN-0057TAZZ	Balun, BLN-0057TA	AC
FB6601	RBLN-0102TAZZY	Balun, BLN-0102TA	AB
FB6602	RBLN-0102TAZZY	Balun, BLN-0102TA	AB

MISCELLANEOUS PARTS

BAT3750	QTANS9041TAFW	Terminal	AD
BAT3751	QTANS9042TAFW	Terminal	AC
P6601	QPLGN0474TAZZ	Plug, 4Pin	AD
SC3701	QSOCZ0075TAZZY	Socket, 15Pin	AM
SC3706	QSOCN4511TAN1	Socket, 45Pin	AH
SC3707	QSOCN1060TAZZ	Socket, 10Pin	AD
SC6602	QSOCN1260TAZZY	Socket, 12Pin	AD
SW3702	QSW-P0106TAZZY	Switch, LCD Close SW	AD
SC3702	QCNCW3080TAZZY	Connector, 30Pin	AE
SC3703	QCNCW1481TAZZ	Connector, 14Pin	AE
SC3704	QCNCW3997TAZZY	Connector, 39Pin	AH
SC3705	QCNCW3997TAZZY	Connector, 39Pin	AH

DUNTK3121QA02
CAMERA PWB UNIT

INTEGRATED CIRCUITS

IC21	VHiCXD3602R-1Y	CXD3602R, Timing Generator	AX
IC101	VHiHD49325H-1Q	HD49325H, CDS/ADC	AX
IC1001	VHiNJM2904V-1	NJM2904V, Op-Amp	AF
IC1002	VHiNJM2112V-1	NJM2112V, Op-Amp	AF

TRANSISTORS

Q1	VS2SC5383F/-1	2SC5383F	AB
Q2	VS2SC4627CD-1	2SC4627CD	AB
Q4	VS2SC4627CD-1	2SC4627CD	AB
Q21	VSCPH3206//-1	CPH3206	AD

DIODE

D1	VHDMC2852//-1	MC2852	AB

PACKAGED CIRCUIT

X21	RCRSZ0083TAZZ	Crystal, CRSZ0083TA	AS

COILS

L23	VPCEM100MR70N	Peaking, 10µH	AC
L24	VPD9M100KR86N	Peaking, 10µH	AC
L101	VPD9M680J8R6N	Peaking, 68µH	AC
L102	VPAWM100K1R5N	Peaking, 10µH	AC
L1001	VPAWM220K2R7N	Peaking, 22µH	AC

CAPACITORS

C1	VCSATA1CJ106M	10	16V	Tantalum	AD
C2	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C3	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C4	VCKYCZ1HF103Z	0.01	50V	Ceramic	AB
C5	VCKYCZ1HB102K	1000p	50V	Ceramic	AB
C6	VCKYTV1EB104K	0.1	25V	Ceramic	AB
C8	RC-KZ0046TAZZ	4.7	35V	Ceramic	AD
C9	VCKYCY1EF104Z	0.1	25V	Ceramic	AA
C21	VCSATE1CJ226M	22	16V	Tantalum	AE
C22	VCSATJ1VJ685M	6.8	35V	Tantalum	AE
C23	VCSATA1AJ106M	10	10V	Tantalum	AC
C24	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C25	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C26	VCSATA1AJ106M	10	10V	Tantalum	AC
C27	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C28	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C29	VCCCCZ1HH221J	220p	50V	Ceramic	AB
C30	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C31	VCCCCZ1HH221J	220p	50V	Ceramic	AB
C32	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C33	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C34	VCKYCZ1CB103K	0.01	16V	Ceramic	AB
C36	VCKYCZ1HB102K	1000p	50V	Ceramic	AB
C37	VCSATA0JJ106M	10	6.3V	Tantalum	AD
C38	VCSATA1VJ155M	1.5	35V	Tantalum	AC
C39	VCSAPR0JJ106M	10	6.3V	Tantalum	AD
C101	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C102	VCKYCZ1CB153K	0.015	16V	Ceramic	AB
C103	VCKYCY0JB105K	1	6.3V	Ceramic	AC
C104	VCKYCZ1AB104K	0.1	10V	Ceramic	AB
C105	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C106	VCKYCY1CB104K	0.1	16V	Ceramic	AB
C111	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C112	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C114	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C115	VCKYCZ1AF104Z	0.1	10V	Ceramic	AB
C116	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C120	VCKYTV1CB105K	1	16V	Ceramic	AC
C121	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C1001	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C1002	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C1003	VCKYCZ1CB223K	0.022	16V	Ceramic	AC
C1004	VCKYCZ1CB223K	0.022	16V	Ceramic	AC
C1005	VCKYCZ1HB332K	3300p	50V	Ceramic	AA
C1006	VCKYCZ1AB473K	0.047	10V	Ceramic	AB
C1007	VCKYCZ1AB473K	0.047	10V	Ceramic	AB
C1008	VCKYCZ1HB332K	3300p	50V	Ceramic	AA
C1009	RC-KZ0074TAZZ	10	6.3V	Ceramic	AF
C1010	RC-KZ0074TAZZ	10	6.3V	Ceramic	AF
C1011	VCCCCZ1HH101J	100p	50V	Ceramic	AB
C1012	VCCCCZ1HH101J	100p	50V	Ceramic	AB
C1013	VCKYCZ1CB223K	0.022	16V	Ceramic	AC
C1014	VCKYCZ1CB223K	0.022	16V	Ceramic	AC
C1015	VCKYCZ1HF103Z	0.01	50V	Ceramic	AB
C1016	VCSATA0JJ156M	15	6.3V	Tantalum	AC
C1017	VCKYCZ1HF103Z	0.01	50V	Ceramic	AB
C1018	VCKYCY1CF104Z	0.1	16V	Ceramic	AA

RESISTORS

R2	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R4	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R5	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R6	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R7	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R10	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R11	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R21	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R23	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R24	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R26	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R27	VRS-CZ1JF112J	1.1k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R28	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R29	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R30	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R31	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R32	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R33	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R34	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R35	VRS-CZ1JF331J		330 1/16W Metal Oxide	AA
R37	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R38	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R40	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R103	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R105	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R106	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R107	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R108	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R109	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R110	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R111	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R112	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R113	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R114	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA
R115	VRS-CZ1JF243J		24k 1/16W Metal Oxide	AA
R116	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R119	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1001	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1002	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1003	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1004	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1005	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1006	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1007	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1008	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1009	VRS-CZ1JF154D		150k 1/16W Metal Oxide	AB
R1010	VRS-CZ1JF154D		150k 1/16W Metal Oxide	AB
R1011	VRS-CZ1JF274J		270k 1/16W Metal Oxide	AA
R1012	VRS-CZ1JF274J		270k 1/16W Metal Oxide	AA
R1013	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1014	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R1015	VRS-CZ1JF153J		15k 1/16W Metal Oxide	AA
R1016	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1017	VRS-CZ1JF154D		150k 1/16W Metal Oxide	AB
R1018	VRS-CZ1JF154D		150k 1/16W Metal Oxide	AB

BALUNE

R22	RBLN-0242TAZZY	Balun, BLN-0242TA	AB

MISCELLANEOUS PARTS

	PSLDM3370TAFW	Shield	AC
RMC1001	RSNSG0013CEZZ	Gyro sensor	AX
RMC1002	RSNSG0004CEZZ	Gyro sensor	AX
SC1002	QCNCW3996TAZZY	Connector, 39Pin	AH

DUNTK3122QA02
LCD PWB UNIT

INTEGRATED CIRCUITS

IC1800	VHiTC7S04U/-1	TC7S04FU,	AE
IC9800	VHiTA75S01F-1	TA75S01F, I DET	AD

TRANSISTORS

Q1800	VSHN1B04FU/-1	HN1B04FU	AC
Q1801	VSHN1B04FU/-1	HN1B04FU	AC
Q1802	VSFMMT717//-1	FMMT717	AE
Q1803	VSRT1N144U/-1	RT1N144U	AB
Q9800	VS2SC5383F/-1	2SC5383F	AB
Q9803	VSHN1B04FU/-1	HN1B04FU	AC
Q9804	VSCPH5504++-1Y	CPH5504++	AE

PACKAGED CIRCUIT

TH9800	VHHT1103K44-1	Thermistor	AD

Ref. No.	Part No.	★	Description	Code

COILS AND TRANSFORMER

L1800	VPD9M470J6R6N		Peaking, 47µH	AC
L9800	RCiLP0323TAZZ		Coil, 4.7µH	AD
L9801	RCiLP0313TAZZ		Coil, 33µH	AE
⚠ T9800	RTRNZ0157TAZZ		Transformer	AL

CAPACITORS

C1800	VCKYCZ1HF103Z		0.01 50V Ceramic		AB
C1802	VCKYCY1EB104KY		0.1 25V Ceramic		AB
C1803	RC-KZ0084TAZZ		1 25V Ceramic		AC
C1804	VCKYCZ1CB103K		0.01 16V Ceramic		AB
C1805	VCKYCY0JB105K		1 6.3V Ceramic		AC
C1807	VCSATA1DJ475M		4.7 20V Tantalum		AC
C1809	VCSATA1DJ475M		4.7 20V Tantalum		AC
C1810	VCKYCY0JB105K		1 6.3V Ceramic		AC
C1811	VCKYCZ1HF103Z		0.01 50V Ceramic		AB
C1812	VCCCCZ1HH390J		39p 50V Ceramic		AB
C1816	VCKYCY0JB105K		1 6.3V Ceramic		AC
C9800	RC-KZ0055TAZZ		3.3 16V Ceramic		AD
C9802	VCKYCZ1AF104Z		0.1 10V Ceramic		AB
C9803	VCKYCZ1CB103K		0.01 16V Ceramic		AB
C9807	VCKYCY1HB332K		3300p 50V Ceramic		AA
C9809	VCKYCZ1CB103K		0.01 16V Ceramic		AB
C9810	RC-KZ0351CEZZ		18p 3kV Ceramic		AD
C9811	VCKYCZ1AF104Z		0.1 10V Ceramic		AB
C9812	VCKYCZ1AB104K		0.1 10V Ceramic		AB
C9815	RC-CZ0061TAZZY		0.022 25V Ceramic		AD

RESISTORS

R1802	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R1803	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1804	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R1805	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA
R1806	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA
R1807	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA
R1808	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R1809	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R1810	VRS-CZ1JF100J		10 1/16W Metal Oxide	AA
R1811	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R1812	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R1813	VRS-CZ1JF821J		820 1/16W Metal Oxide	AA
R1814	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R1815	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R1816	VRS-CZ1JF330J		33 1/16W Metal Oxide	AA
R1817	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1818	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1819	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1820	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1821	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1825	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1826	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R1827	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R1828	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R1829	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R9800	VRS-CZ1JF121J		120 1/16W Metal Oxide	AA
R9801	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R9802	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
R9804	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R9805	VRS-CZ1JF182D		1.8k 1/16W Metal Oxide	AB
R9806	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R9807	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R9808	VRS-CZ1JF271D		270 1/16W Metal Oxide	AB
R9809	VRS-CZ1JF271D		270 1/16W Metal Oxide	AB
R9810	VRS-CY1JFR22J		0.22 1/16W Metal Oxide	AA
R9812	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R9813	VRS-CZ1JF153D		15k 1/16W Metal Oxide	AB
R9817	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R9818	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA

BALUNES

FB1800	RBLN-0028TAZZ	Balun, BLN-0028TA	AB
FB9800	RBLN-0028TAZZ	Balun, BLN-0028TA	AB

Ref. No.	Part No.	★	Description	Code
			MISCELLANEOUS PARTS	
SC1800	QSOCN1572TAZZY		Socket, 15Pin	AE
SC1801	QSOCN1571TAZZY		Socket, 32Pin	AD
SC1802	QSOCN1019TAN1		Socket, 10Pin	AG
SC1803	QSOCN2448TAZZ		Socket, 24Pin	AF

RAMP-0035TAN5 HEAD AMP PWB UNIT

			INTEGRATED CIRCUITS	
IC301	VHiBH7275KV-1		BH7275KV, REC/PB Amp IC	AU
IC302	VHiM24C04W6-1		M24C04W6, E²PROM IC	AE
			TRANSISTORS	
Q302	VS2SC4738Y/-1		2SC4738Y	AA
	or			
	VS2SC4617B/-1		2SC4617B	AA
	or			
	VS2SC5383F/-1		2SC5383F	AB
Q303	VS2SC4738Y/-1		2SC4738Y	AA
	or			
	VS2SC4617B/-1		2SC4617B	AA
	or			
	VS2SC5383F/-1		2SC5383F	AB
			COIL	
L301	VPAWM4R7MR70N		Coil, 4.7µH	AC
			CAPACITORS	
C301	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C302	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C303	VCSATE1AJ336M		33 10V Tantalum	AG
C304	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C305	VCCCCY1HH331J		330p 50V Ceramic	AA
C306	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C307	VCCCCY1HH331J		330p 50V Ceramic	AA
C308	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C309	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C310	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C311	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C312	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C313	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C314	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C315	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C318	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C319	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C320	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C321	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C322	VCKYCY0JB105K		1 6.3V Ceramic	AC
C323	VCKYCZ1HB102K		1000p 50V Ceramic	AB
C324	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C327	VCKYCZ1EB472K		4700p 25V Ceramic	AB
C329	VCSATA1AJ106M		10 10V Tantalum	AC
C330	VCKYCZ1HF103Z		0.01 50V Ceramic	AB
C331	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C332	VCKYCZ1EB472K		4700p 25V Ceramic	AB
C333	VCKYCZ1CB822K		8200p 16V Ceramic	AB
C340	VCCCCZ1HH5R0C		5p 50V Ceramic	AC
C342	VCCCCZ1HH5R0C		5p 50V Ceramic	AC
C343	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C344	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
C345	VCKYCZ1AF104Z		0.1 10V Ceramic	AB
			RESISTORS	
R304	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R308	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R309	VRS-CZ1JF512J		5.1k 1/16W Metal Oxide	AB
R310	VRS-CZ1JF433J		43k 1/16W Metal Oxide	AA
R311	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R312	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R313	VRS-CZ1JF822J		8.2k 1/16W Metal Oxide	AA
R314	VRS-CZ1JF101J		100 1/16W Metal Oxide	AA
R315	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R316	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R317	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R318	VRS-CZ1JF513J		51k 1/16W Metal Oxide	AA
R319	VRS-CZ1JF182J		1.8k 1/16W Metal Oxide	AA
R320	VRS-CZ1JF182J		1.8k 1/16W Metal Oxide	AA
R321	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA
R324	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R330	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R332	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R333	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R377	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R380	VRS-TV1JD100J		10 1/16W Metal Oxide	AA
			MISCELLANEOUS PARTS	
P306	QCNCM8082TAZZ		Plug, 80Pin	AK
SC301	QSOCN0925TAN1		Connector, 9Pin	AE
SC303	QSOCN1006TAN1		Connector, 10Pin	AE
SC304	QSOCN0706TAN1		Connector, 7Pin	AE
SC305	QSOCN2071TAZZ		Connector, 20Pin	AD
SC306	QSOCN1871TAZZ		Connector, 18Pin	AE

MECHANISM PARTS

Ref. No.	Part No.	★	Description	Code
301	LCHSM0181GEZZ		Main Chassis Ass'y	AQ
302	MLEVF0539GEFW		Eject Control Lever	AD
303	MLEVF0502GEFW		Pinch Control Lever	AD
304	NGERH3062GEFW		Main Cam	AD
305	MLEVF0503GEZZ		Shifter Drive Lever Ass'y	AE
306	MLEVF0505GEFW		Loading Lever	AD
307	MARMM0130GEZZ		S Loading Arm Ass'y	AF
308	MARMM0131GEZZ		Tu Loading Arm Ass'y	AF
309	MLEVF0508GEFW		T Arm Control Lever	AD
311	LANGG9121GEFW		CAP FPC Stopper	AD
312	LANGF9016GEZZ		Intermediate Gear ANG Ass'y	AG
313	MARMM0132GEZZ		Swing Arm Ass'y	AG
314	LANGJ0053GEFW		Mechanism Fixing Angle	AH
315	LANGJ0054GEFW		Head amp PWB ANG	AE
324	RDTCH0039GEZZ		Dew Sensor	AD
330	CCHSS0050GE03		FPC Affixing Slide Chassis	AY
331	LCHSS0050GEZZ		Slide Chassis Ass'y	AN
332	CPWBH6079GE01		Sensor FPC Ass'y	AV
334	LHLDP0104GEZZ		S-LED Holder	AC
335	LHLDP0105GEZZ		Tu-LED Holder	AC
337	LHLDZ0115GEZZ		Sensor FPC Guide	AC
338	QSW-M0035TAZZ		Down SW	AC
339	QTANZ0006GEZZ		Mic Contact SW	AG
340	RH-PX0180TAZZ		Cassette LED	AE
341	RH-PX0211TAZZY		S/E Sensor	AD
342	RDTCM0006TAZZ		Reel Sensor	AC
344	LANGG9124GEFW		Slide Adjustment ANG	AC
345	CANGG9123GE01		Down Guide with Label	AF
347	TLABH0590GEZZ		Cassette Control Caution Label	AB
351	MLEVF0542GEZZ		Tension Arm Ass'y	AG
352	MLEVF0511GEZZ		Tu Guide Arm Ass'y	AG
353	MLEVF0512GEZZ		Brake Shifter Ass'y	AE
354	LBNDK3022GEZZ		Tension Band Ass'y	AF
355	LANGA0073GEZZ		Reel Cover Ass'y	AG
356	LANGJ0038GEFW		T Spring Hanging ANG	AC
357	MLEVP0302GEZZ		Swing Arm Release Lever	AC
360	MLEVP0329GEZZ		Eject Lever	AC
361	MLEVP0296GEZZ		Pinch Drive Lever	AB
362	PGiDM0156GEZZ		Guide Rail	AC
363	PGiDM0186GEZZ		T Arm Control Lever Stopper	AC
364	NGERH1300GEZZ		Intermediate Gear A Ass'y	AE
365	NGERH1301GEZZ		Intermediate Gear B Ass'y	AB
366	NPLYV0164GEZZ		Intermediate Pulley Ass'y	AC
367	NPLYV0165GEZZ		Center Pulley Ass'y	AC
369	NGERH1302GEZZ		AHC Cam	AB
370	NGERH1303GEZZ		Coupling Gear	AB
371	NGERH1304GEZZ		Sub Cam	AC
372	NGERH1305GEZZ		S Loading Gear	AC
373	NGERH1306GEZZ		Tu Loading Gear	AC
374	MLEVP0333GEZZ		S Main Brake	AC
375	MLEVP0309GEZZ		Tu Main Brake	AB
376	LHLDX1046GEZZ		S Cassette Stay	AC
377	LHLDZ2024GEZZ		FPC Cover	AB
381	PGiDP0031GEFW		Tu Pole	AD
382	PGiDS0046GEFW		T Roller Upper Flange	AE
383	PGiDS0047GEFW		T Roller Bottom Flange	AE
384	NSFTL0761GEFW		T Roller Inner	AE
385	PGiDP0042GEFW		S Guide Sleeve	AD
386	PGiDM0170GEZZ		Slide Chassis Guide	AC
390	MSPRD0184GEFJ		Swing Arm Release SPR.	AC
391	MSPRT0417GEFJ		Main Brake SPR.	AB
392	MSPRT0436GEFW		T Arm SPR.	AB
393	MSPRD0178GEFJ		Tu Guide Arm SPR.	AB
394	MSPRD0179GEFJ		Pinch Lever Return SPR.	AB
395	MSPRD0180GEFJ		S Pressure SPR.	AB
396	MSPRD0181GEFJ		Tu Pressure SPR.	AB
397	MSPRC0220GEFJ		Guide Adjustment SPR.	AA
398	MSPRC0221GEFJ		Drum Fixing SPR.	AA
399	MSPRP0185GEZZ		PB Guide SPR.	AC
401	LX-WZ1071GE02		CW ø 0.7 ø 1.8t0.1	AC
402	LX-WZ1104GE06		CW ø 0.7 ø 2.2t0.25	AB
403	LX-WZ1029GE00		CW ø 1.2 ø 3t0.25	AA
411	LZ-WZ1105GE00		W ø 1.2 ø 2.5t0.13	AA
412	LZ-WZ1106GE00		W ø 1.2 ø 2.5t0.2	AA
413	XWHJZ12-03025		W ø 1.2 ø 2.5t0.3	AA
414	XWHJZ12-04025		W ø 1.2 ø 2.5t0.4	AA
415	XWHJZ12-05025		W ø 1.2 ø 2.5t0.5	AA
420	LX-BZ3202GEFF		Swing Arm Release Lever Fixing Screw	AC
421	LHLDZ2025GEZZ		Intermediate Gear Stopper	AB
425	LX-BZ0107GEFF		Special Screw M1.2 x L1	AB
426	LX-BZ0108GEFF		Special Screw M1.2 x L3.3	AA
428	LX-NZ0102GEFW		S Guide Hexagon Nut	AC
429	LX-BZ3203GEFF		Type 1 Minuteness Screw M1.4 x L1	AB
430	LX-BZ3185GEFN		Special Screw M1.4 x L2	AB
431	LX-BZ3135GEFF		Type 2 Minuteness Screw M1.4 x L1	AA
432	LX-BZ3201GEFF		Special Head Screw M1.4 x L2	AB
433	LX-BZ3132GEFF		Special Head Screw M1.4 x L1.5	AA
434	LX-BZ3131GEFN		Special Screw M1.4 x L1.6	AA
435	LX-HZ3089GEFF		S Tight Screw M1.4 x L2	AA
436	LX-HZ3076GEFF		S Tight Screw M1.4 x L3	AA
437	LX-HZ3088GEFF		L Motor Installation Screw	AB
438	LX-BZ3225GEFF		Drum Installation Screw	AC
439	LX-BZ3181GEFN		GR Lock Screw	AD
440	LX-HZ3084GEFF		S Tight Screw M1.4 x L4	AC
451	LPOLM0065GEZZ		Sup Pole Base Ass'y	AK
452	LPOLM0066GEZZ		Tu Pole Base Ass'y	AK
453	CGiDM0158GE03		Drum Base Ass'y	AH
454	NROLM0046GEZZ		Guide Roller Ass'y	AM
455	NROLM0045GEZZ		T Roller Ass'y	AK
456	NDAiV1076GEZZ		S Reel Base Ass'y	AM
457	NDAiV1077GEZZ		Tu Reel Base Ass'y	AK
458	MLEVF0526GEZZ		Pinch Lever Ass'y	AP
459	NBLTT0016GEZZ		Drive Belt	AD
461	RMOTM1080GEZZ		L Motor Ass'y	AQ
462	RMOTV1023GEZZ		Capstan Motor	AY
463	QSW-R0039GEZZ		Mode SW	AE
465	QPWBH5911GEZZ		LM/Mode FPC	AG
466	PDMP-0032GEZZ		Damper	AF
470	DDRMV0069GE03		Drum Ass'y	BZ
500	RAMP-0035TAN5		Head Amp PWB Unit	—
501	PSLDM3352TAFW		H/A FPC Shield Plate	AX
502	LANGG9125GEFW		Sensor FPC Cover	AC
503	ZTAPEZ212010M		Dew FPC Cover	AB

CASSETTE CONTROL PARTS

Ref. No.	Part No.	★	Description	Code
600	CHLDX3093GE01		Cassette Control Ass'y	AT
601	LHLDX3093GEZZ		Housing Ass'y	AT
602	LANGF9655GEZZ		Top Cover Ass'y	AG
603	MSPRT0434GEFJ		Lock SPR	AB
604	MSPRT0435GEFJ		UP-SPR	AB
610	TLABH0589GEZZ		Cassette Control Lock Label	AB
434	LX-BZ3131GEFN		Special Screw M1.4 x L1.6	AA

CABINET PARTS LIST

Ref. No.	Part No.	★	Description	Code
1	CCABA6231TAK1		Cabinet A Ass'y	BP
1-1	DCOVA1798TAK2		Battery Cover Service	AQ
1-1-2	JBTN-0349TASA		Battery Lock Button	AE
1-1-3	JKNBP0228TAZZ		Battery Lock	AD
1-1-4	MSPRD0085TAFJ		Battery Lock Spring	AB
1-1-5	PSHEP0242TAZZ		Battery Guide Hole Cover	AC
1-1-6	PSHEP0243TAZZ		Angle Covering Sheet	AA
1-1-7	TLABH0463TAZZ		Battery Label	AC
1-2	DFTAC1316TAK1		Cassette Lid Service	AS
1-2-1	GCOVA1818TASA		Power Supply Decoration Cover	AD
1-2-3	JBTN-0346TASA		Power Supply Lock Button	AD
1-2-4	JKNBP0227TASA		Power Supply Knob	AF
1-2-5	MSPRC0153TAFJ		Power Supply Lock Spring	AA
1-2-6	PMLT-0236TAZZ		Dust Protection Sheet B	AC
1-4	GCOVA1803TASA		AV/S Terminal Cover	AD
1-5	GCOVA1851TAKA		Cassette Lid Cover	AL
1-6	JBTN-0347TASA		S/S Button	AH
1-7	JBTN-0348TASA		Cassette Lid Lock Button	AD
1-8	JKNBP0226TASA		Media Selector Knob	AF
1-9	LANGK0513TAFW		Speaker Fitting	AC
1-10	LANGK0628TA01		Frame Ass'y	AY
1-11	LANGK0631TAFW		Frame Reinforcing Fitting	AE
1-12	LANGK0632TAFW		SW Fixing Bracket	AF
1-13	LANGK0633TA01		Lid Lock Ass'y	AM
1-14	LHLDE1004TASA		Strap Holder	AC
1-15	LHLDZ1656TAZZ		Media Selector Knob Holder	AC
1-16	LHLDZ1628TAZZ		AV/S Terminal Holder	AD
1-17	MSPRC0153TAFJ		Power Supply Lock Spring	AA
1-18	PMLT-0235TAZZ		Dust Protection Sheet A	AE
1-19	PSHEP0248TAZZ		Covering Sheet	AB
1-20	PSHEP0253TAZZ		Mechanism Sound Insulation Sheet	AD
1-21	PZETE0050TAZZ		DV Insulation Sheet	AA
1-22	PZETE0051TAZZ		Main PWB Insulation Sheet	AB
1-23	QSW-Z0370TAZZ		Power Supply S/S Unit	AR
1-24	QTANZ0149TAZZ		Battery Terminal Unit	AQ
1-25	RUNTK0409TAZZ		AV/S Terminal Unit	AT
1-26	UBNDT0139TASA		Hand Strap	AL
1-27	VSP0020P-968N		Speaker	AL
2-1	DCABB6264TAK1		Cabinet B Service	AZ
2-1-2	GCOVA1852TAKA		Cabinet B Cover	AL
2-1-3	GFTAS1016TAKA		Card Lid	AG
2-1-4	JBTN-0350TASA		Menu Button	AD
2-1-5	JBTN-0351TASA		Snap Button Front	AH
2-1-6	LANGK0636TAFW		Card Lid Axle Fixing Bracket L	AD
2-1-7	LANGK0637TAFW		Card Lid Axle Fixing Bracket R	AC
2-1-8	LANGK0638TAFW		Card Lid Fixing Bracket	AH
2-1-9	LANGK0639TAFW		Shoulder Belt Fitting	AF
2-1-10	MSPRD0086TAFJ		Card Lid Spring	AC
2-1-11	PSPAZ0412TAZZ		LCD Spacer	AA
2-1-13	QEARP0312TAZZ		Earth Sheet A	AB
2-1-14	QEARP0313TAFW		Earth Plate	AC
2-1-15	QEARP0320TAFW		LCD Earth Plate	AC
2-2	JKNBP0230TASA		Focus Selector Knob	AE
2-3	JKNBP0231TASA		Manual Selector Knob	AE
2-4	LANGK0640TAFW		LCD Tilt Reinforcing Fitting	AG
2-5	LHLDZ1630TAZZ		Selector Knob Holder	AD
2-6	QSW-ZA002WJZZ		Operation Key Unit	AV
2-7	QSW-Z0371TAZZ		Camera Operation Unit	AZ
2-8	PSHEP0255TAZZ		Camera PWB spacer	AA
2-9	PSPAZ0426TAZZ		JOG Spacer	AA
2-10	PSPAZ0417TAZZ		PWB Spacer	AB
3-1	DCOVA1793TAK1		VF Diopter Cover Service	AS
3-1-2	GCOVA1811TASA		VF Eye Cap	AF
3-1-3	JKNBP0232TAZZ		VF Diopter Knob	AD
3-1-4	LHLDZ1636TAZZ		VF Diopter Holder	AD
3-1-5	MLEVP0049TAZZ		VF Diopter Lever	AD
3-1-6	MSPRP0222TAFJ		VF Diopter Adjusting Spring	AC
3-1-7	PLNSV0009TAN3		VF Lens	AM
3-1-8	PSHEP0245TAZZ		VF Diopter Covering Sheet	AD
3-2	GCOVA1857TAKA		VF Cover(Upper)	AL
3-3	GCOVA1809TAKA		VF Cover(Lower)	AH
3-4	GCOVD1007TAZZ		VF LCD Protection Cover	AF
3-5	GCOVD1014TAZZ		VF Slide Protection Cover	AC
3-6	KLMPV0058TAZZ		VF Backlight Unit	AX
3-7	LANGG0047TA00		Stay Cover ANG	AE
3-8	LANGK0642TAFW		VF Tilt ANG	AV
3-9	LHLDZ1633TAZZ		VF LCD Holder(Front)	AE
3-10	LHLDZ1635TAZZ		VF LCD Holder(Rear)	AE
3-11	LHLDZ1639TAZZ		VF LCD Holder(Middle)	AE
3-12	LHLDZ1650TAZZ		VF Diopter Guide Holder(L)	AC
3-13	LHLDZ1651TAZZ		VF Diopter Guide Holder(R)	AC
3-14	PMLT-0237TAZZ		VF Dust Protection Spacer Front	AC
3-15	PMLT-0238TAZZ		VF Dust Protection Spacer Rear	AC
3-16	PSHEZ0032TAZZ		VF Sliding Sheet	AC
3-17	RLCDV0068TAZZ		VF LCD Unit	BM
3-18	TLABH0465TAZZ		VF Label(R)	AB
4	CCOVA1794TAK1		Tilt Cover Ass'y	AK
4-2	GCOVA1817TASA		R/C Cover	AD
5-1	DCOVA1853TAK1		Top Cover Service	AY
5-1-2	GCOVA1805TASA		DV Terminal Cover	AK
5-1-3	GCOVA1854TAKA		Top Decoration Cover	AL
5-1-4	GCOVA1819TASA		DV Terminal Cover Hinge	AD
5-1-5	HDECQ0082TASA		Top Grip Decoration	AD
5-1-6	JBTN-0352TASA		Snap Button Rear	AK
5-1-7	JBTN-0353TASA		Top Operation Button	AH
5-1-8	JKNBP0229TASA		Zoom Lever	AG
5-1-9	LHLDZ1638TAZZ		Zoom Lever Holder	AD
5-1-10	QEARP0323TAFW		Snap Earth Plate Rear	AB
5-1-12	QEARP0349TAZZ		DV Sheet	AC
5-2	LANGK0648TAFW		Hot Shoe Fixing ANG	AE
5-3	LHLDZ1637TAZZ		DV Terminal Holder	AD
5-4	PSHEP0251TAZZ		Tilt Protection Sheet	AB
5-5	PSPAZ0419TAZZ		Sound Insulation Spacer A	AB
5-6	PSPAZ0422TAZZ		Sound Insulation Spacer D	AC
5-7	QJAKE0083TAZZ		Hot Shoe Unit	AM
5-8	QPWBH3227TAZZ		Hot Shoe FPC	AG
5-9	QSW-Z0368TAZZ		Zoom Unit	AQ
5-10	QSW-Z0373TAZZ		Snap PWB	AK
5-11	RUNTK0411TAZZ		DV·232C Unit	AT
6	CPWBH2925TA01		Head Amp-Main FPC	AR
7	CCABC6112TAK1		Lens Cabinet Ass'y	BF
7-2	GCOVA3123TASA		Focus Fixing Ring	AR
7-3	GCOVA3124TASA		Focus Ring	AS
7-4	GCOVA3125TASA		Microphone Cover	AK
7-5	HiNDP0246TASA		Lens Nameplate	AE
7-6	LHLDZ1631TAZZ		Focus Detecting Ring	AD
7-7	LHLDZ1632TAZZ		Microphone Holder	AD
7-8	LHLDZ1647TAZZ		Microphone Cover Holder	AD
7-9	PCOVP1035TAZZ		Microphone Covering Sheet	AC
7-10	PSHEP0224TAZZ		Focus Sliding Sheet A	AE
7-11	PSHEP0225TAZZ		Focus Sliding Sheet B	AE
7-12	PSPAZ0418TAZZ		Microphone Sound Insulation Spacer	AC
7-13	QEARP0314TAFW		Focus Fixing Ring Earth Plate	AC
7-14	QEARP0315TAZZ		Focus Earth Sheet A	AE
7-15	QEARP0346TAFW		Microphone Cover Earth Plate	AB
7-16	QEARP0347TAZZ		Focus Earth Sheet B	AE
7-17	RMiCC0106TAZZ		Microphone Unit	AQ
7-18	RUNTK0410TAZZ		Focus Detecting Sensor	AQ
8	CHLDZ1625TA01		Lens Holder Ass'y	AM
8-1	LANGK0627TAFW		Lens Fixing Bracket	AF
8-2	LHLDZ1625TAZZ		Lens Fixing Holder	AF
8-3	PSPAZ0420TAZZ		Sound Insulation Spacer B	AB

Ref. No.	Part No.	★	Description	Code
8-4	PSPAZ0421TAZZ		Sound Insulation Spacer C	AB
8-5	PSPAZ0422TAZZ		Sound Insulation Spacer D	AC
9	PLNSA0147TAN1		Lens Unit	BX
10	PMLT-0245TAZZ		Gasket	AD
11	PSHEG0059TAZZ		Heat Conducting Sheet C	AF
12	PSHEG0060TAZZ		Heat Conducting Sheet D	AH
13	PSPAZ0421TAZZ		Sound Insulation Spacer C	AB
14	CANGK0625TA01		Shield Case Rear Ass'y	AM
14-1	LANGK0625TAFW		Shield Case Rear	AF
14-2	PSPAZ0406TAZZ		LCD Spacer	AE
14-3	PTPEH0075TAZZ		LCD Fixing Tape	AE
15	CANGK0626TA01		Shield Case Front Ass'y	AH
15-2	PSHEP0240TAZZ		Insulation Sheet Front	AB
15-3	PSHEP0241TAZZ		Insulation Sheet Rear	AA
16	DCABE6058TAK3		LCD Cabinet Ass'y	AU
16-2	GCOVA1855TAKA		LCD Decoration Cover	AG
16-3	HDECP0098TASA		LCD Nameplate	AF
16-4	JBTN-0354TASA		LCD Lock Button	AD
16-5	MSPRD0087TAFJ		LCD Lock Spring	AB
16-6	NSFTZ0169TAFW		LCD Lock Shaft	AB
16-7	HBDGB0053TASA		SHARP Badge	AF
17	CCOVA1797TAK1		Tilt Cover Ass'y	AZ
17-2	GCOVA1814TAKA		Tilt Cover Lower	AF
17-3	LANGK0649TAFW		LCD Tilt Hinge	AT
17-4	PSHEP0239TAZZ		Tilt FPC Insulation Sheet	AA
17-5	QSW-Z0372TAZZ		Tilt FPC	AT
18	DUNTK3122QA02		LCD PWB Unit	—
19	GCOVA1879TAKA		LCD Front Cover	AL
20	KLMPV0059TAZZ		Backlight	AT
21	PGiDM0037TAZZ		Light Guide Plate	AG
22	PMiR-0045TAZZ		Reflection Sheet	AD
23	PSHEP0044TAZZ		Prism Sheet	AG
24	PSHEP0045TAZZ		Diffusion Sheet	AD
25	RLCDV0069TAZZ		LCD Panel	BT
26	ZTAPEP109020E		Light Guide Plate Retaining Tape	AA
27	DUNTK3119QA02		Main PWB Unit(AX1S)	—
27	DUNTK3119QA03		Main PWB Unit(AX1H)	—
27	DUNTK3119QA04		Main PWB Unit(AX1E/EW)	—
27	DUNTK3119QA05		Main PWB Unit(AX1EX)	—
28	QPWBH3224TAZZ		Main-Sub 1, 2 FPC	AE
29	QPWBH3225TAZZ		Main-Sub 3 FPC	AF
30	LANGK0650TAFW		Sub PWB Fixing Bracket	AE
31	GCOVA1705TASB		Fitting Cover	AC
32	LANGT0465TASA		Shoe Fitting	AE
33	GCOVA1767TASA		Lens Hood	AH
35	GCOVA1816TASA		Lithium Battery Storage Lid	AD
36	GCOVH1270TASA		Lens Cap	AH
37	TLABM2249TAZZ		Model Label(AX1S)	AE
37	TLABM2250TAZZ		Model Label(AX1H)	AE
37	TLABM2251TAZZ		Model Label(AX1E)	AE
37	TLABM2252TAZZ		Model Label(AX1EW)	AE
37	TLABM2253TAZZ		Model Label(AX1EX)	AE
40	DUNTK3120QA02		Sub PWB Unit	—
41	DUNTK3121QA02		Camera PWB Unit	—
42	TLABZ0501TAZZ		Label(AX1UK)	AC
43	TLABZ0636TAZZ		Feature Label	AC
44	TLABZ0637TAZZ		Feature Label	AC
46	PSPAZ0438TAZZ		Sheet	AB
A	LX-BZ0221TAFC		M1.7 X 3 Small Screw (Silver, Screw-lock)	AB
B	LX-BZ0232TAFD		Floating Screw	AB
C	LX-BZ0245TAFF		Floating Screw	AB
D	LX-BZ3132GEFF		M1.4 X 1.5 Special Screw (Black)	AA
E	LX-BZ3169GEZZ		M1.4 X 2.5 Small Screw (Black)	AA
F	LX-HZ0017TAFF		M2 X 8 Tap (Black)	AA
G	LX-HZ0045TAFN		M2 X 4 Tap (Silver)	AA
H	LX-HZ0050TAFF		M1.7 X 4 Tap (Black)	AA
I	LX-HZ0050TAFN		M1.7 X 4 Tap (Silver)	AA
J	LX-HZ0063TAFF		M1.7 X 6 Tap (Black)	AA
K	LX-HZ0063TAFN		M1.7 X 6 Tap (Silver)	AA
L	LX-HZ0075TAFD		M1.7 X 4.5 Special Screw (Colored Zinc)	AA
M	XiPSC17P05000		M1.7 X 5 Small Screw (Silver)	AA
N	XiPSF17P02000		M1.7 X 2 Small Screw (Black)	AA
O	XiPSF17P03000		M1.7 X 3 Small Screw (Black)	AA
P	XiPSF17P04000		M1.7 X 4 Small Screw (Black)	AA
Q	XiPSN17P02000		M1.7 X 2 Small Screw (Silver)	AA
R	XiPSN17P03000		M1.7 X 3 Small Screw (Silver)	AA
S	XiPSN17P04000		M1.7 X 4 Small Screw (Silver)	AA

CAMERA UNIT PARTS LIST

1	PFiLW0089TAZZ	Crystal Filter	AW
2	PCOVM8016TA00	Dust Protection Rubber	AC
3	VHLiCX286AK-1	CCD Sensor	BT
4	LANGK0607TAFW	CCD Retaining Plate	AC
5	PSLDM3370TAFW	Shield Case B	AC
6	PSHEG0061TAZZ	Heat Conducting Sheet A	AE
7	DUNTK3121QA02	Camera PWB Unit	—
8	CPWBH3087TA01	Camera=Main FPC	AL
9	PSHEG0057TAZZ	Heat Conducting Sheet B	AE
10	PSLDM3369TAMS	Shield Case A	AD
11	LX-HZ0013TAFF	M1.7x6 Tap (Black)	AA
12	XiPSN17P02000	M1.7x2 Small Screw (Silver)	AA

Ref. No.	Part No.	★	Description	Code

SUPPLIED ACCESSORIES

ACCESSORIES

⚠	QACCB0016TAZZ	AC Cable(AX1H/EW)	AV
⚠	QACCK0006TAZZ	AC Cable(AX1S/E)	AL
⚠	QACCL0026TAZZ	AC Cable(AX1EX)	AN
⚠	UADP-0321TA01	AC Adapter	BF
	CDSKA0080TA01	SD Card(8M)	BD
	GCOVA1767TASA	Lens Hood	AH
	GCOVH1270TASA	Lens Cap	AH
	QCNW-1914TAZZ	PC Cable	BG
	QCNW-1957TAZZ	DC Cable	AT
	QCNW-1979TAZZ	AV Cable	AK
	RMiCC0105TAZZ	Zoom Microphone	BD
	RRMCG0104TASA	Remote Control	AN
	UBATi0053TAZZ	Battery Pack	BG
	UBATL0011TAZZ	Lithium Battery(x2)	AE
	CDSKA0059TA01	CD-ROM	AK
	UBNDS0024TAZZ	Shoulder Strap	AH
	TiNS-6048TAZZ	PC Soft Licence	AG
	TiNSE0154TAZZ	Service Guide(AX1H)	AA
	TiNSE0435TAZZ	Operation Manual(AX1H)	AQ
	TiNSE0436TAZZ	Quick User Guide(AX1H)	AF
	TiNSL0305TAZZ	Operation Manual (German/French)(AX1S)	AS
	TiNSL0306TAZZ	Operation Manual (Dutch/Italian/Spanish)(AX1S)	AW
	TiNSL0307TAZZ	Operation Manual (Swedish/Portuguese/English) (AX1S)	AW
	TiNSL0308TAZZ	Operation Manual (AX1E/EX)	AX
	TiNSL0310TAZZ	Operation Manual (AX1EW)	AX
	QPLGA0010GEZZ	Plug Converter(AX1E/EX)	AF

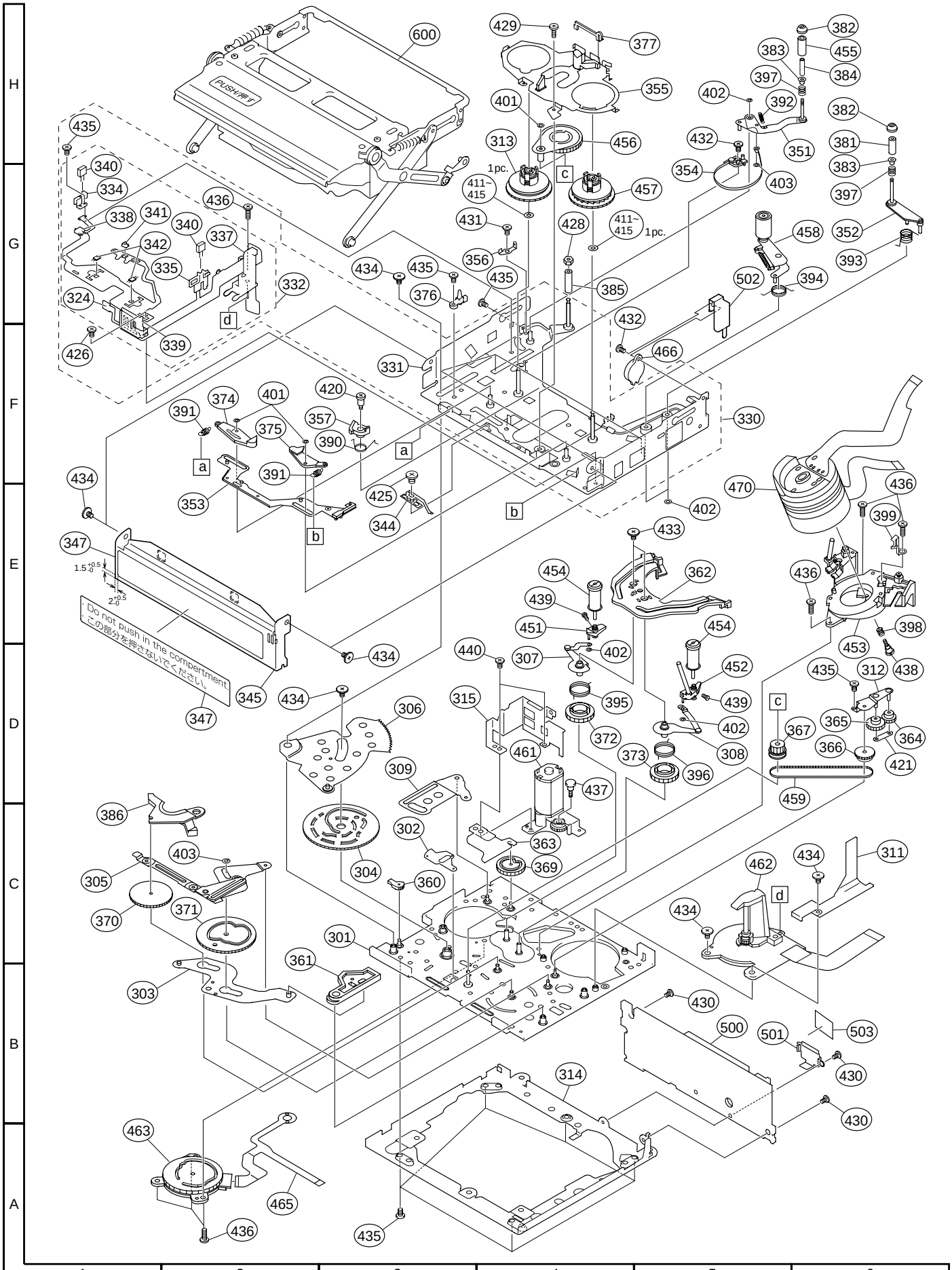
ACCESSORIES
(NOT REPLACEMENT ITEM)

TGANE0057TAZZ	Guarantee Card(AX1H)	—
TGANL0004TAZZ	Guarantee Card(AX1S)	—
TLABK0001TAZZ	No. Card(x2)	—

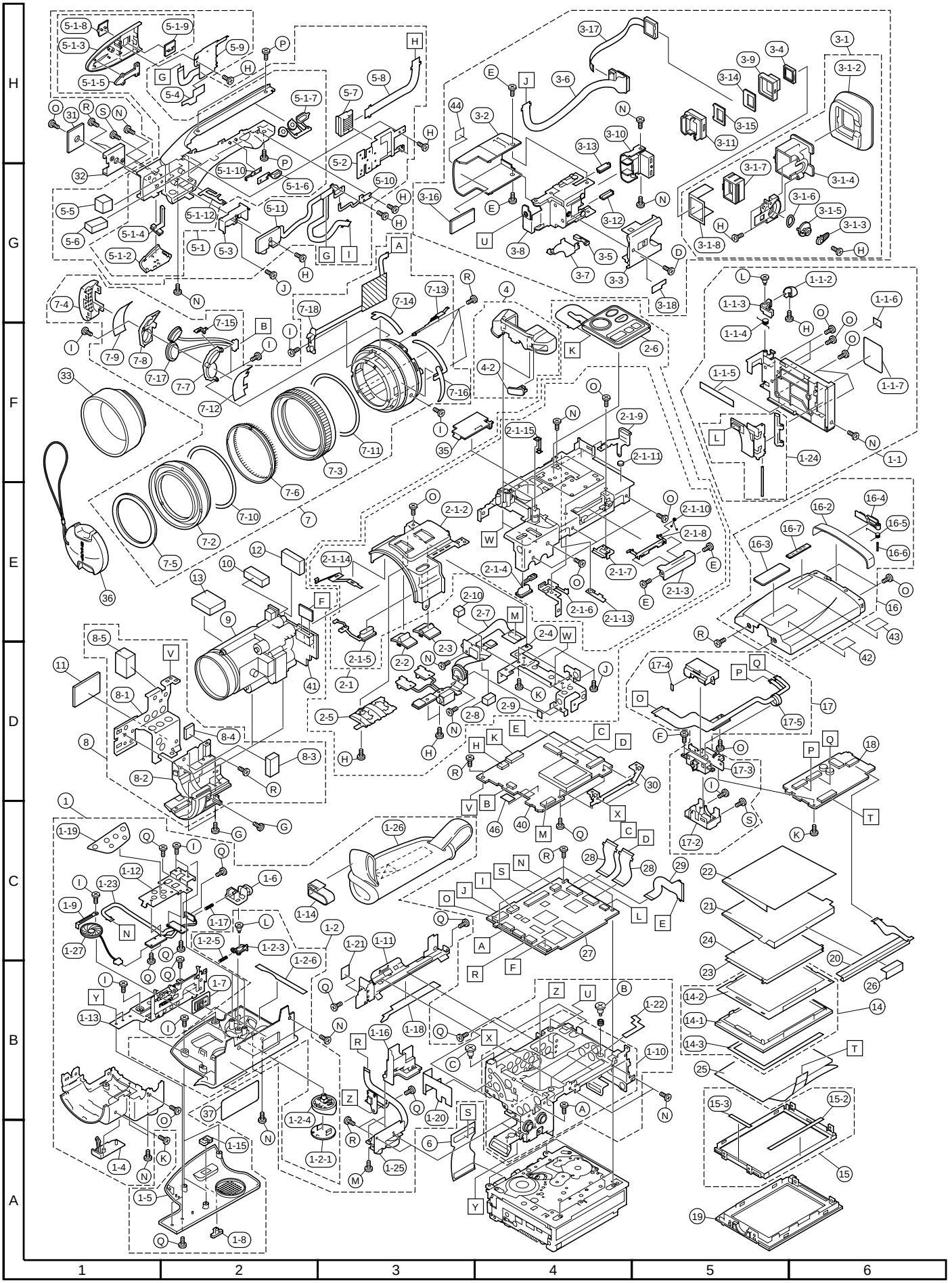
PACKING PARTS
(NOT REPLACEMENT ITEM)

SPAKC7668TAZZ	Packing Case(AX1S)	—
SPAKC7669TAZZ	Packing Case(AX1H)	—
SPAKC7670TAZZ	Packing Case (AX1E/EW/EX)	—
SPAKA6413TAZZ	Packing Add.(Bottom)	—
SPAKA6412TAZZ	Packing Add. (Top)	—
SPAKF0297TAZZ	AC Adapter Pad	—
SPAKP6108TAZZ	Side Pad	—
SPAKP6159TAZZ	Wrapping Paper	—
SSAKA0087TAZZ	Polyethylene Bag (AX1H/E/EW/EX)	—
SSAKA0117TAZZ	Polyethylene Bag(AX1S)	—
SSAKA0120TAZZ	Polyethylene Bag	—
SPAKA6417TAZZ	Packing Add.	—

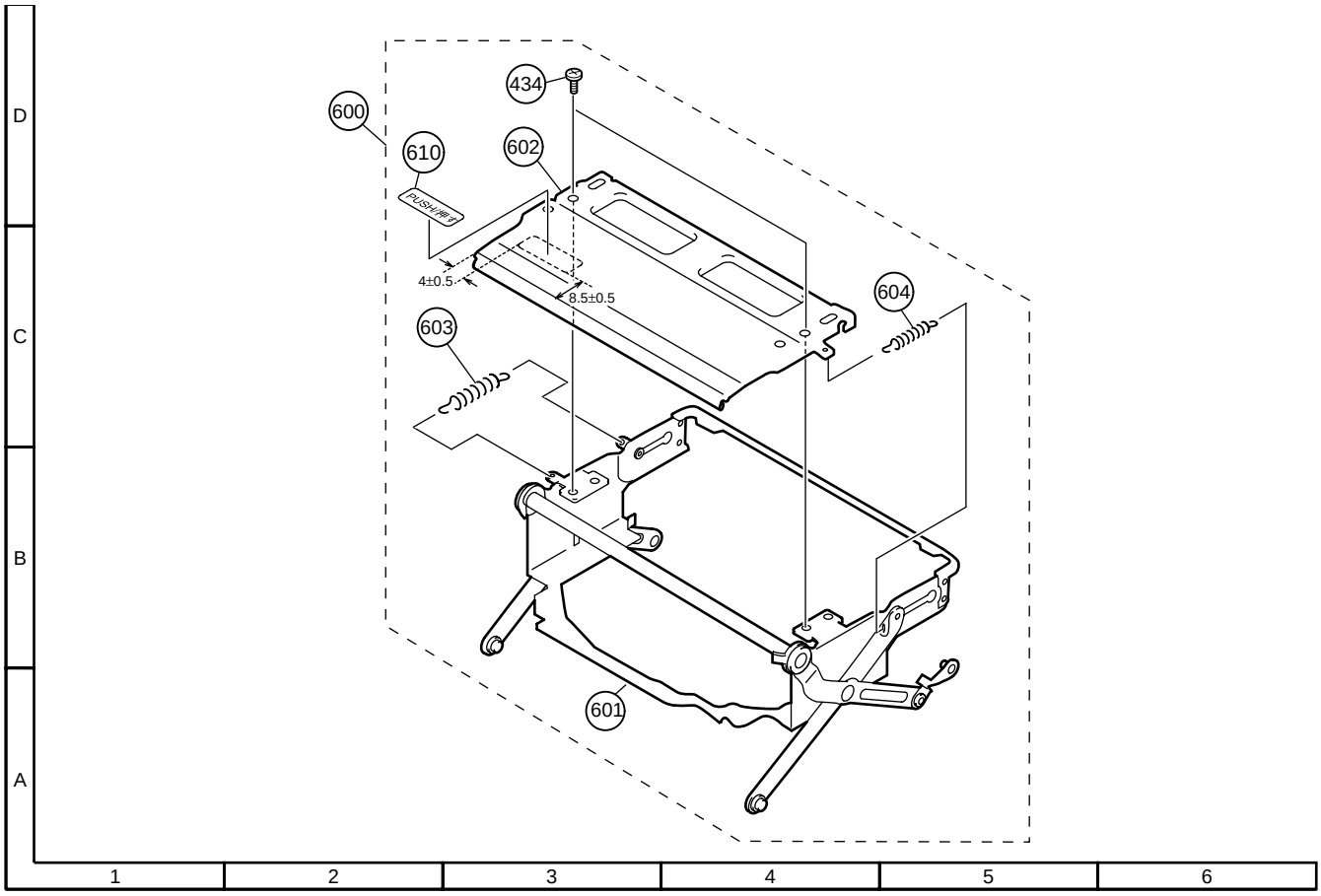
MECHANISM CHASSIS EXPLODED VIEW



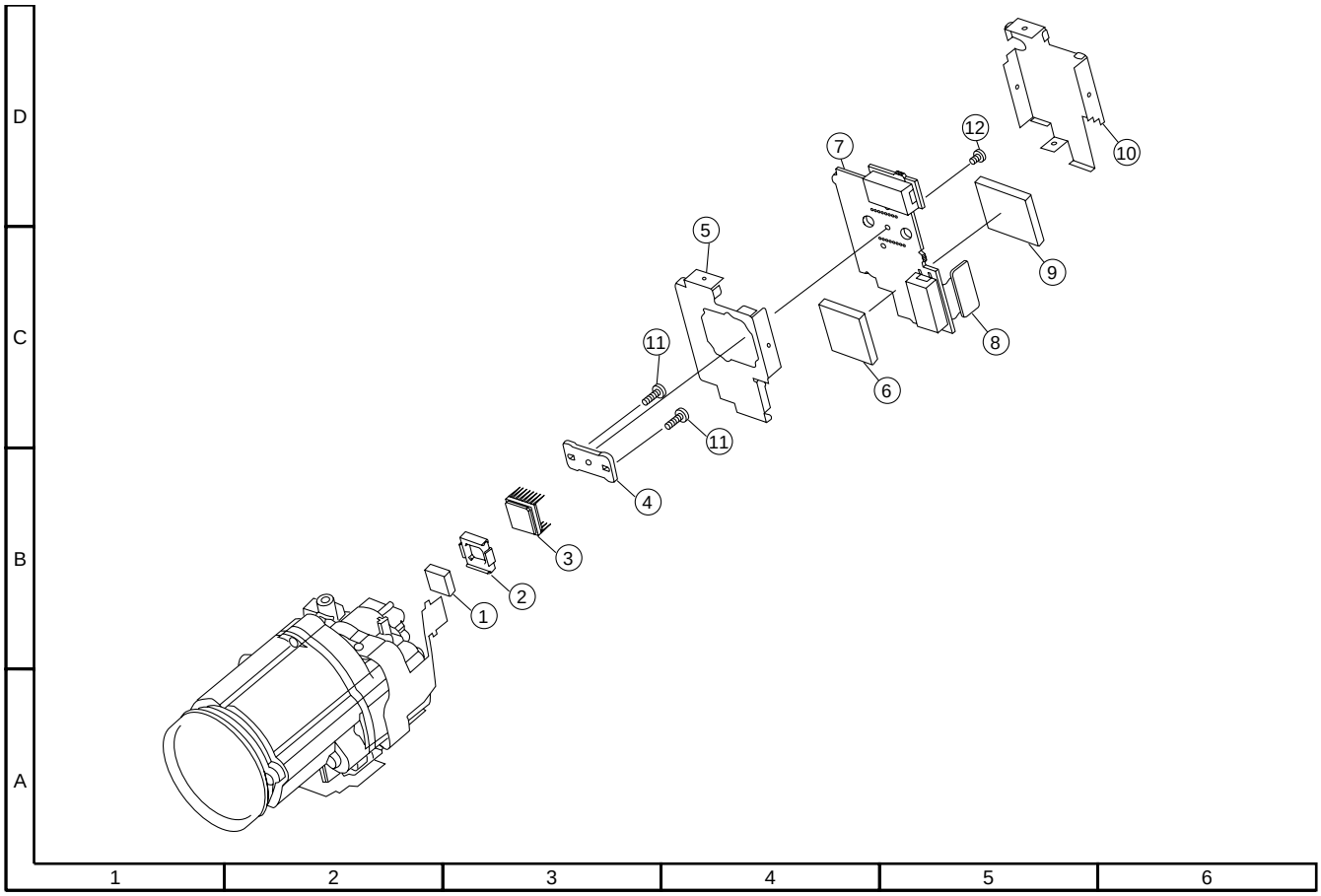
CABINET EXPLODED VIEW



CASSETTE CONTROL EXPLOOD VIEW



CAMERA UNIT EXPLOOD VIEW



VL-AX1S/H/E/EW/EX SERVICE JIG SPECIFICATIONS

1-1. Adjusting jigs for checking the mechanism

No.	Name	New part	Type number, Application	Part code	Code
1	PB-use cassette torque meter		1mN·m/1.5mN·m	9DASD-1015	DB
2	Torque gauge		For use in VS-REW take up torque adjustment	JiGTG0045	CN
3	Torque gauge head		For use with the above torque gauge	9EQTGH-DH5000	BW
4	Tension gauge 4N		For measuring of pinch roller pressure	JiGSG0400	BK
5	Dial tension gauge		PTG-10	9DAPTG-10-10W	CA
6	Torque screwdriver 150mN·m		No. 0 cross bit, No. 00 cross bit	JiGTD1500RTDH	CB
7	Master plane		For checking the reel base height	9EQMP-VLPD1	CL
8	Height adjustment jig		For height adjusting	9DAHG-PD1	BZ
9	Height adjustment screwdriver		For guide roller adjustment. For Tu guide adjustment. For T roller adjustment. Bit shape.	9EQDRiVER-DH5	BC
10	Alignment tape - I		For tape running adjustment	VR3-GAZXS	CF
11	Alignment tape - II		For Switching Point adjustment	VR3-JPZQS	CG
12	For hexagon nut opposite side 3mm bit		For S guide hexagon nut installation.	95CM22001	BL
13	Reel hub for back tension measurement		Refer to Service Manual.	Prepared in the service station.	–
14	String for measuring the pinch roller pressure		Refer to Service Manual.	Prepared in the service station.	–

1-2. Parts for periodical inspection and maintenance

No.	Name	New part	Type number, Application	Part code	Code
1	Oil		Cosmo Hydro HV22	9EQ-OiL-HV22	AE
2	Cleaning paper		Dusper ∑ (SIGMA) ozu Co., LTD	JiGDUSPER	AP
3	Grease: Moly Coat YM-103		Dow corning	99FGREASE-YM103	AH